LG
Life's Good

32LX570H	**49LX570H**
40LX570H	**55LX570H**
43LX570H	**65LX570H**

Lodging Guest Interactive Pro:Centric® TVs

Commercial Mode Setup Guide

Note: Selected features shown in this guide may not be available on all models.

For Customer Support/Service, please call:

1-888-865-3026

The latest product information and documentation is available online at:

www.LGsolutions.com

MODEL and SERIAL NUMBER
The model and serial numbers of this TV are located on the back of the cabinet. For future reference, LG suggests that you record those numbers here:

Model No._____ Serial No._____

⚡ | **WARNING**
RISK OF ELECTRIC SHOCK
DO NOT OPEN | ❗

WARNING:

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.

⚡ The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

❗ The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

WARNING:
This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. ***Wash hands after handling***.

POWER CORD POLARIZATION:
This product is equipped with a 3-wire grounding-type alternating current power plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the 3-wire grounding-type plug.

NOTE TO CABLE/TV INSTALLER:
This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electrical Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

CAUTION:
Do not attempt to modify this product in any way without written authorization from LG Electronics U.S.A., Inc. Unauthorized modification could void the user's authority to operate this product.

COMPLIANCE:
The responsible party for this product's compliance is: LG Electronics U.S.A., Inc.
1000 Sylvan Avenue, Englewood Cliffs, NJ 07632, USA • Phone: 1-201-816-2000

Marketed and Distributed in the United States by LG Electronics U.S.A., Inc.
1000 Sylvan Avenue, Englewood Cliffs, NJ 07632

     206-4278

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it exits from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination in order to avoid injury from tip-over.

PORTABLE CART WARNING

13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

14. Never touch this apparatus or antenna during a thunder or lightning storm.

15. When mounting a TV on the wall, make sure not to install the TV by the hanging power and signal cables on the back of the TV.

16. Do not allow an impact shock or any objects to fall into the product, and do not drop objects onto the screen.

17. **Power Cord**
Caution: It is recommended that appliances be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the TV specifications.

Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer. Protect the power cord from physical or mechanical abuse, such as twisting, kinking, or pinching or being closed in a door or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

Do not use a damaged or loose power cord. Be sure to grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.

18. **Overloading**
Do not connect too many appliances to the same AC power outlet as this could result in fire or electric shock. Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in fire or electric shock.

19. **Outdoor Use/Wet Location**
Warning: To reduce the risk of fire or electrical shock, do not expose this product to rain, moisture or other liquids.

Do not touch the TV with wet hands. Do not install this product near flammable objects such as gasoline or candles or expose the TV to direct air conditioning.

Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc., on or over the apparatus (e.g., on shelves above the unit).

20. **Grounding**
Ensure that you connect the earth ground wire to prevent possible electric shock (i.e., a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightning rods, or gas pipes.

21. **Disconnect Device**
The mains plug is the disconnecting device. The plug must remain readily operable.

As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if you turn off this unit by SWITCH.

IMPORTANT SAFETY INSTRUCTIONS

(Continued from previous page)
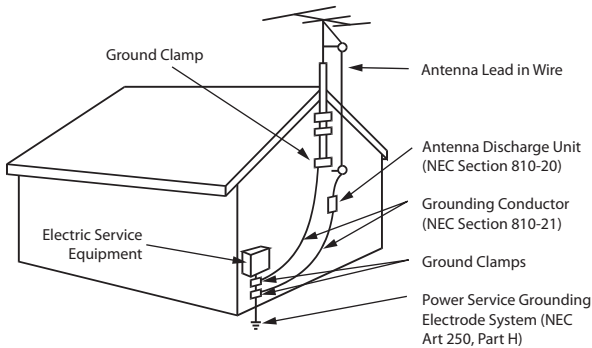
22. Outdoor Antenna Grounding
If an outside antenna or cable system is connected to the product, follow the precautions below.

An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits or where it can come into contact with such power lines or circuits as death or serious injury can occur.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Article 810 of the National Electrical Code (NEC) in the U.S.A. provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Antenna Grounding According to NEC, ANSI/NFPA 70

Ground Clamp

Antenna Lead in Wire

Antenna Discharge Unit
(NEC Section 810-20)

Grounding Conductor
(NEC Section 810-21)

Ground Clamps

Electric Service
Equipment

Power Service Grounding
Electrode System (NEC
Art 250, Part H)

23. Cleaning
When cleaning, unplug the power cord and wipe gently with a soft cloth to prevent scratching. Do not spray water or other liquids directly on the TV as electric shock may occur. Do not clean with chemicals such as alcohol, thinners or benzene.

24. Transporting Product
Make sure the TV is turned Off and unplugged and that all cables have been removed. It may take two or more people to carry larger TVs. Do not press against or put stress on the front panel of the TV during transport.

25. Ventilation
Install the TV where there is proper ventilation. Do not install in a confined space such as a bookcase. Do not cover the TV with cloth or other materials (e.g., plastic) while it is plugged in. Do not install in excessively dusty places.

26. Do not touch the ventilation openings, as they may become hot while the TV is operating.

27. If you smell smoke or other odors coming from the TV or hear strange sounds, unplug the power cord, and contact an authorized service center.

28. Do not press against the front panel of the TV with your hand or a sharp object (e.g., a nail, pencil, or pen) or make a scratch on it.

29. Keep the product away from direct sunlight.

30. Dot Defect
The LCD panel is a high technology product with resolution of two million to six million pixels. In a very few cases, you could see fine dots on the screen while you are viewing the TV. Those dots are deactivated pixels and do not affect the performance and reliability of the TV.

31. Generated Sound
"Cracking": A cracking noise that occurs while the TV is On or when it is turned Off is generated by plastic thermal contraction due to temperature and humidity. This noise is common for products where thermal deformation is required.

Electrical circuit humming/panel buzzing: A low level noise is generated from a high-speed switching circuit, which supplies a large amount of current to operate a product. It varies depending on the product. This generated sound does not affect the performance and reliability of the product.

32. For LCD TV
If the TV feels cold to the touch, there may be a small "flicker" when it is turned On. This is normal; there is nothing wrong with the TV. Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the TV's performance. Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

Notes

- Installer Menu content is intended for use primarily by qualified TV electronics technicians.
- Refer to the applicable Owner's Manual for additional information on TV installation, specifications, maintenance, and safety instructions.
- Design and specifications subject to change without prior notice. This document provides examples of typical TV displays. Your displays may vary from those shown in this document.

Commercial Mode Overview

This document describes how to set up LX570H Pro:Centric® TVs for Commercial Mode operation. LG commercial TV functionality is based on "ownership" of the Channel Map; that is, the Channel Map resides in the TV's CPU, Protocol Translator Card (PTC), or the embedded *b*-LAN™ (EBL) module, or it resides externally from the TV (i.e., in a device from the solution provider).

These TV models are capable of Free-To-Guest (FTG) Mode operation via the TV CPU. Alternatively, the EBL module can be configured either for Pass-through Mode (default) or FTG Mode. When neither the CPU nor EBL is in FTG Mode, these TV models also allow external control via the TV's MPI port.

Setup Checklist

Note: This document provides information specific to Commercial Mode operation. Refer to the Owner's Manual for information on TV installation and hardware and cable connections.

Installation
__ Unpack TV and all accessories.
__ Install batteries in the Installer Remote.
__ Install TV on VESA mount or stand.
   Note: It may be advisable to make all cable connections before installing on VESA mount or stand, as appropriate.

Hardware Connections
__ Install any additional hardware as appropriate to your institution, LAN, etc.

Cable Connections
__ Make all rear jack panel connections, as appropriate.

Commercial Mode Setup
__ Complete appropriate procedures as described in this document for Commercial Mode operation.

Pass-through Mode

This mode allows you to configure individual TVs for Pro:Centric and/or FTG Mode via CPU operation. This mode also allows external control via the GAME CONTROL/MPI port on the TV rear jack panel.

There are two methods for configuring individual TVs that are currently in Pass-through Mode: either using the EZ-Manager Wizard or the Custom Master TV Setup procedure as described in this document.

EZ-Manager Wizard

When the TV is in a factory default state, the EZ-Manager Wizard provides automated or manual options for configuring essential items for Pro:Centric operation and also provides an option for using a USB memory device to configure the TV. Use the Installer Remote to make selections and complete each step. See "EZ-Manager Wizard" on pages 12 to 18 for detailed information.

Custom Master TV Setup

The Custom Master TV Setup procedure enables you to create a customized Master TV Setup for Pass-through Mode or FTG Mode via CPU configuration purposes. Use the Installer Remote to configure Installer Menu items as required for TV operation and set up TV features (Channel, Picture, Audio, etc.). See "Custom Master TV Setup" on pages 32 to 34 for detailed information.

Installer Menu

To create a Master TV Setup, you will need to know how to access the commercial controller (PTC) Installer Menu and make changes to the default values as required. If necessary, familiarize yourself with the Installer Menu and how to make and save changes. Refer to pages 22 to 31 for information on accessing the Installer Menu and for detailed descriptions of the Installer Menu items.

TV Setup Menus

On-screen setup menus control the features of the TV. Use the Installer Remote to access the TV setup menus, and set the TV features to the desired configuration for the end user.

Cloning

Cloning refers to the process of using a Master TV Setup to configure a Target TV. The Master TV's clonable setup menu features should be configured as part of the Master TV Setup. If there are features in the Master TV's setup—channel icons or labels, digital font options, etc.—that are not set or that are set incorrectly, those features also will not be set or will be set incorrectly in the Target TVs. Refer to pages 35 to 38 for detailed information on cloning requirements and procedures.

External MPI Control

To control the TV using an external MPI control device, you must use the TV's GAME CONTROL/MPI port for communication purposes. In these TVs, Installer Menu item 118 POWER SAVINGS controls the power circuitry for both the embedded *b*-LAN module and the GAME CONTROL/MPI port; therefore, to ensure that the GAME CONTROL/MPI port circuitry is powered, thus enabling MPI communication, Installer Menu item 118 POWER SAVINGS must be set appropriately. See Installer Menu item descriptions as well as Reference section, "*b*-LAN Setup & Overview," for further information.

Note: These TV models are not equipped with MPI card slots.

FTG Mode

In this mode, an FTG Channel Map enables the decryption of each Pro:Idiom® encrypted channel. The FTG Channel Map also provides logical channel mapping of physical RF channels (analog and digital) and Aux inputs. The method for creating the FTG Channel Map is ultimately determined by which element of the TV will "own" the FTG Channel Map—the CPU or the EBL.

For these TV models, there are two FTG Modes—FTG Mode via CPU and FTG Mode via EBL—which are separate and distinct FTG Modes of operation, each with its own unique advantages and requirements, as outlined on the following page.


```
xxLX570H  PTC  INSTALLER  MENU
              CPU-CTV

000   INSTALLER SEQ      000

UPN  000-000-000-000        ASIC  D279
PTC  V1.00.008         CPU  V3.00.20.01
```

Typical Installer Menu

PICTURE   AUDIO   CHANNEL   TIME

LOCK   OPTION   INPUT   MY MEDIA
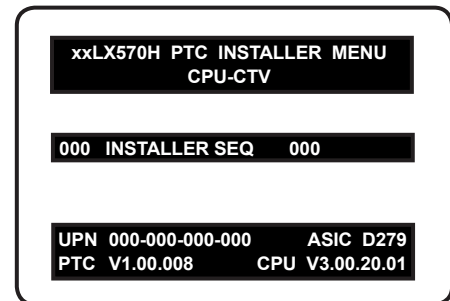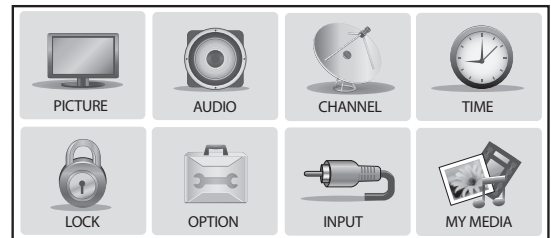
TV Setup Menus

Commercial Mode Overview (Cont.)

When the TV CPU is configured with an FTG Channel Map, the CPU controls and restricts the tuning operation of the TV, and when the EBL is configured with an FTG Channel Map, the EBL controls and restricts the tuning operation of the TV. In these models, FTG Mode via CPU also provides the option to select either logical or physical tuning (see note below) during configuration. You must determine which element of the TV will own the FTG Channel Map before you can begin configuration.

Note: Logical channel mapping of physical RF channels eliminates dash tuning; for example, physical 19-3 can be mapped to logical channel 9. It also allows physical RF channels and Aux inputs to be listed in any order, not only in physical numeric ascending order. Physical channel tuning requires that you include the dash when direct entering RF channel numbers and Aux inputs (the latter designated by 130-0 through 137-0).

FTG Mode via CPU

This mode provides the following features:

- Logical or physical tuning of physical RF channels and Aux inputs.
- Mapping of RF channels with minor (program) numbers up to 999.
- FTG Channel Map of up to 600 channels.
- Start Channel set for RF or Aux input delivered content.
- Pro:Centric data delivery over RF or IP.
- TV Zoning option for location-specific configuration.

LG's FTG File Manager PC software enables you to create an FTG Configuration (.tlx) file, which may be used to configure the CPU for FTG Mode. You can also create a Clone (.tlx) file from a Master TV Setup that may be used to configure the CPU for FTG Mode. In this mode, the CPU is the owner of the FTG Channel Map and must be configured with an FTG Channel Map and FTG Installer Menu settings using one of the following processes:

- Local: Configure an individual LX570H TV via its USB port using a USB memory device / ".tlx" file. The file may be either a Clone file (see "Cloning Procedures" on pages 35 to 38) or an FTG Configuration file (see "FTG File Manager Utilities Overview" on pages 39 to 44).
- Remote: Configure all LX570H TVs at the site using a Pro:Centric server head end device (Example: PCS200R). Refer to the *Pro:Centric Server Admin Client User Guide* for further information.

FTG Mode via EBL

This mode provides the following features:

- Logical tuning of physical RF channels and Aux inputs.
- Mapping of RF channels with minor (program) numbers up to 255.
- FTG Channel Map of up to 141 logical channels.
- Start Channel set for RF or Aux input delivered content.
- Pro:Centric data delivery over RF.

LG's FTG Device Configuration Application PC software is required to configure the EBL. In this mode, the EBL is the owner of the FTG Channel Map and must be configured with an FTG Channel Map and FTG Installer Menu settings using one of the following processes:

- Local: Configure an individual LX570H TV's EBL via its TV-LINK CFG jack using a direct PC-to-TV (EBL) connection and the FTG Device Configuration Application. See Reference section, "FTG Mode via EBL (Local Configuration)," for information on the "Write" process for an FTG Channel Map and FTG Installer Menu settings.
- Remote: Configure all LX570H TV EBLs at the site using a Free-To-Guest Management Appliance (FMA) head end device (Example: FMA-LG101). Refer to the *Free-To-Guest (FTG) Device Configuration Application User Guide* and/or the Installation & Configuration Guide for the FMA device for further information.

While the TV is in FTG Mode:

• Users can still access the Installer Menu using an LG Installer Remote; however, all Installer Menu items will be read-only.

• FTG Mode via CPU configuration changes must be made using a ".tlx" file (typically edited in the FTG File Manager), while FTG Mode via EBL configuration changes must be made using the FTG Device Configuration Application. FTG Channel Map Configuration and FTG Installer Menu Configuration utilities in both PC applications enable you to make changes, respectively, to the FTG Channel Map and FTG Installer Menu settings as necessary. Based on the initial method used to configure the TV for FTG Mode operation (via CPU or EBL), all subsequent changes must be transferred to either the TV CPU or the EBL via a process that is in accordance or compatible with that method (see information on local configuration in this document or refer to documentation for the head end device/server for information on remote management).

• If it becomes necessary to restore the TV to Pass-through Mode, there are several options that will enable you to do so. See Reference section, "Restoring Factory Defaults on the TV(s)," for further information.

Pages 39 to 44 provide overviews of the utilities that comprise the FTG File Manager. Refer to the *Free-To-Guest (FTG) File Manager User Guide* for further information on the FTG File Manager. Refer to the *Free-To-Guest (FTG) Device Configuration Application User Guide* for information on the FTG Device Configuration Application.

Remote Management in FTG Mode

When the TV is configured for FTG Mode via CPU, remote management of the FTG Channel Map and FTG Installer Menu settings is provided by a Pro:Centric server, via a Clone/Configuration (.tlx) file loaded on the Pro:Centric server Admin Client. Refer to the *Pro:Centric Server Admin Client User Guide* for further information.

When the TV is configured for FTG Mode via EBL, the *b*-LAN module, which is internal to the TV, allows hotel/institution head end equipment (for example, an FMA-LG101) with *b*-LAN technology to provide remote management of the FTG Channel Map and FTG Installer Menu settings. See Reference section, "*b*-LAN Setup & Overview," for further information.

Determining the TV Operating Mode

To determine the operating mode of the TV, press **MENU SETTINGS** on the Installer Remote. The menu displayed depends on the operating mode. If the Function Menu (see example below) appears, the TV is in a mode (FTG, PPV, etc.) that does not allow the end user to change the fundamental TV setup. If the TV setup menus (see example on page 7) appear, the TV is in Pass-through Mode.

ASPECT RATIO	◇ Move ◉ OK
16:9	
Just Scan	
Set By Program	
4:3	
Zoom	
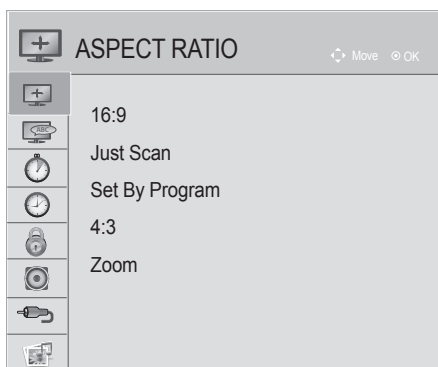
Function Menu
Indicates the TV is not in Pass-through Mode. While the TV is in this mode, Installer Menu settings can be accessed as read-only.

Pro:Centric Operation

Pro:Centric Interactive Menu Features

LG's Pro:Centric application enables guests to locate and select television entertainment using an interactive channel guide, check the daily weather, and view hotel and surrounding amenities via custom billboards and points-of-interest maps.

Pro:Centric application features include:

• Portal and information screens/pages (including a "Welcome" page) that include branding logos.

• An optional customized user interface (custom "skins").

• Billboards and points-of-interest maps that can be customized to focus on hotel amenities, local attractions and businesses, restaurants, news, events, etc.

• An optional Weather billboard that includes a local radar map, current conditions, and a four day forecast.

• An interactive channel guide that provides a channel list with channel icons. An electronic program guide (EPG) is an optional feature that displays up to three days of programming information viewable by channel and time.

• Video spooling that enables the hotel to deliver a video file to guest TVs for promotion and information purposes.

The Pro:Centric server Admin Client web editor/content wizard is provided for customer configuration of portal messages and billboards/maps.

Note: Customized content is typically defined by the service integrator and/or hotel administrators. LG does not provide hotel-specific content.

Pro:Centric Interactive Menu Navigation

An LG Pro:Centric-capable TV remote control provides access to both interactive menus and regular TV features. Press **PORTAL** on the remote to access the interactive menus.

Note: Interactive menu options may vary, depending on Pro:Centric features enabled for the site. The following are default interactive menus.

Channel Guide
Shows available TV networks and logical channels. When available, EPG data provides additional channel and program information.

Information
Typically displays information on hotel amenities, for example, restaurants, in-room dining, business centers, facilities, etc., as well as information on local weather and attractions.

Help
Provides help for navigating the interactive menus.

Watch TV
Removes the interactive menu from the screen and returns to the previously tuned TV channel.

Pro:Centric Setup

Administration and management options for the Pro:Centric server are described in detail in the *Pro:Centric Server Admin Client User Guide*. This document describes only those settings that must be specified on the TVs to enable Pro:Centric remote management and/or the Pro:Centric application.

• Remote management (TV E-Z Installation): The Pro:Centric server Admin Client provides remote management facilities for downloading splash screen image and software/firmware updates as well as facilities for downloading a Clone/Configuration (.tlx) file for FTG Mode via CPU configuration.

• Pro:Centric application: The application, which operates in conjunction with FTG and PPV Modes, comprises the Pro:Centric interactive menus/features described on the previous page. Pro:Centric application settings are managed via the Pro:Centric server Admin Client.

The Pro:Centric server settings can be configured using one of the methods described below.

TV in Factory Default State

When the TV is in a factory default state, the EZ-Manager Wizard provides automated or manual options for configuring the Pro:Centric server settings.

The EZ-Manager Wizard also provides a USB configuration option that enables you to configure a TV for FTG Mode via CPU using a Clone/Configuration (.tlx) file stored on a USB memory device. The ".tlx" file incorporates FTG Installer Menu settings, including Installer Menu items 098 PRO:CENTRIC and 119 DATA CHANNEL, which are used to set up the TV's Pro:Centric feature.

Refer to "EZ-Manager Wizard" on pages 12 to 18 for further information on the EZ-Manager Wizard options.

Note: If Pro:Centric data delivery will be over IP and there is a DNS server at the site, you can create a DNS entry "procentric.local" for the Pro:Centric server that will enable automated Pro:Centric IP configuration via the EZ-Manager. If there is no DNS entry for procentric.local, you will need to manually enter the Pro:Centric server IP address and port number during configuration.

TV in Pass-through Mode

If the TV is in Pass-through Mode, either:

• Set Installer Menu items 098 PRO:CENTRIC and 119 DATA CHANNEL to the appropriate values. See Installer Menu information on pages 22 to 31 for further details. Also, as necessary, refer to "Custom Master TV Setup" on pages 32 to 34 and/or cloning information on pages 35 to 38.

• Configure the appropriate Pro:Centric server settings in the IP Environment / Pro:Centric Menu. You must use this option, in particular, if you wish to configure IP settings for the Pro:Centric server. See "Accessing the IP Environment Menu" on page 45 and "Pro:Centric Setup" on pages 47 to 48 for further information.

Note: When the TV is in either Pass-through Mode or FTG Mode via CPU, you can also leave Installer Menu item 119 DATA CHANNEL set to its default value (255) to enable the TV's Data Channel Auto Search feature to set the DATA CHANNEL value. See item 119 description on page 31 for additional information.

TV in FTG Mode

If the TV is in FTG Mode (via CPU or EBL), use the appropriate FTG application software to update Installer Menu items #98 Pro:Centric and #119 Data Channel (along with their affiliated fields). Then, transfer the FTG Installer Menu settings to the TV in accordance with the FTG Mode of configuration. Refer to the FTG Mode overview on pages 7 to 9 for further information on FTG Mode operation and configuration. Also—for FTG Mode via CPU only—see note above regarding the option to use the TV's Data Channel Auto Search feature to set the DATA CHANNEL value.

EZ-Manager Wizard

The primary purpose of the EZ-Manager Wizard is to guide you through the process (automated or manual) of configuring the essential Installer Menu items for Pro:Centric operation. The wizard will appear on the screen each time the TV is turned ON, until one of its configuration methods has been completed or the wizard is exited. Use the Installer Remote to make selections and complete each wizard step.

While the EZ-Manager Wizard is intended primarily for Pro:Centric-related configuration, the wizard also offers Zoning as well as USB configuration options.

• LX570H TVs support the TV Zoning feature, which enables location-specific settings (see Reference section, "Using the TV Zoning Feature," for further information). The EZ-Manager Wizard enables you to set the TV Zone # in the TV as part of the configuration process.

• The EZ-Manager Wizard also enables you to redirect to the TV's standard TV Manager / USB Download Menu as part of the configuration process, if desired, to perform USB configuration and/or update functions.

> ⚠ **Caution: Do NOT unplug the TV power cord or remove the antenna cable or, if applicable, the LAN cable during the configuration process, as doing so will interrupt the current step and may corrupt the configuration data.**

Before You Begin

• If you plan to create a Master TV Setup using the procedure described on pages 32 to 34, be sure to exit the EZ-Manager Wizard in order to avoid setting modes that may restrict the custom setup procedure. See also "Initiate Configuration or Exit the EZ-Manager Wizard" below.

• If it has been completed or exited and therefore does not display, the EZ-Manager Wizard can be reactivated; however, this requires that you restore the TV to a factory default condition. See Reference section, "Restoring Factory Defaults on the TV(s)," for further information.

• Each wizard step is allotted a time frame after which the wizard proceeds without user interaction. If the Pro:Centric server is configured on the system and if no location-specific settings are required in the TV, for example, TV Zone, Label, and/or Room Number settings, you can simply turn ON the TV, and once initiated, the wizard will proceed through each of the configuration steps with no further user interaction.

• If any of the configuration steps fails, you will see a "Diagnostics" screen with an indication of the failure. You will then have the opportunity to reinitiate the configuration process from the previous screen or exit the EZ-Manager Wizard.

Initiate Configuration or Exit the EZ-Manager Wizard

The Welcome screen provides a brief introduction to the EZ-Manager Wizard.

EZ-Manager Wizard

Welcome to LG's EZ-Manager Wizard

• Use this setup wizard to configure the TV for Pro:Centric and/or Free-To-Guest (FTG) operation.
  Select 'Next' to continue.
• If a Pro:Centric Server will not be installed and/or you do not wish to use the wizard to configure this TV for FTG Mode, you may exit the wizard.
  Select 'No Pro:Centric' to disable the Pro:Centric feature of this TV, or select 'Exit' to quit.

This setup wizard will start automatically in 10 seconds.

| No Pro:Centric | Exit | Next |

Note: If there is no user action in this screen within 10 seconds, the wizard will proceed to the first configuration step. Once the wizard has proceeded, it is not possible to return to the Welcome screen; however, if you simply wish to exit the wizard, you can do so by selecting the "Exit" option from the subsequent screen(s).

From the Welcome screen, you have the following options:

- To proceed with the EZ-Manager Wizard, use the arrow keys on the Installer Remote to select/highlight **Next** and press **OK**. Then, continue to the "TV Configuration Options" section below.

- To exit the wizard, but retain the use of the Pro:Centric remote management feature on this TV (i.e., Installer Menu item 119 DATA CHANNEL set to 255) in the future, use the arrow keys on the Installer Remote to select/highlight **Exit** and press **OK**. In the confirmation pop-up window, select **OK**, and then press **OK** once more on the Installer Remote.

- If you do not intend to install a Pro:Centric server on this system and you do not wish to use the wizard's Zoning or USB configuration options, exit the wizard as follows: Use the arrow keys on the Installer Remote to select/highlight **No Pro:Centric** and press **OK**. This will disable the Pro:Centric feature of this TV (i.e., Installer Menu item 119 DATA CHANNEL will be set to 0). In the confirmation pop-up window, select **OK**, and then press **OK** once more on the Installer Remote.

TV Configuration Options

From the TV Configuration Options screen, you can choose how to proceed with the configuration of this TV (assuming you do not opt to exit the wizard, which you may also do at any time).

⚠ **Note: If you intend to use the Zoning feature on the TV for location-specific configuration purposes, select the "Zone & Room Number" option from this screen and assign the appropriate TV Zone # in the TV BEFORE you continue with additional configuration.**
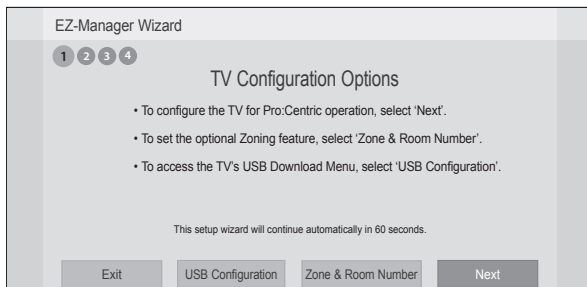
Note: If there is no user action in this screen within one minute, the wizard will automatically continue to the next configuration step.

Use the Left/Right arrow keys on the Installer Remote to navigate between options on this screen. Each time you select/highlight one of the following options, the screen text and fields will change in accordance with your selection.

- To continue with Pro:Centric configuration, select **Next** (default) and press **OK** on the Installer Remote. Refer to "Configure Pro:Centric Settings" on pages 15 to 17 for additional information.

- Select **Zone & Room Number** to set the Zoning feature on this TV. See "Zone and Room Number Assignments" on the following page for further information.

- Select **USB Configuration** to access the TV Manager / USB Download Menu. See "USB Configuration" on page 18 for further information.

Note: If you choose to exit the EZ-Manager Wizard from this point on, you will have the option to save any settings made by selecting **Save and Exit** in the exit confirmation pop-up window. Or, you can exit the wizard without saving any settings by simply selecting **OK** in the confirmation pop-up window.

EZ-Manager Wizard (Cont.)

Zone and Room Number Assignments

You may complete one or more of the fields in the Zone, Label, and Room Number screen or leave them at their default settings (Zone) or blank (Label and Room Number), as desired; however, if you intend to use the Zoning feature on this TV, you MUST specify the appropriate value in the Zone field as described below. See also Reference section, "Using the TV Zoning Feature," for further information.

Note: The Zoning feature is only applicable for TVs that will be configured using a ".tlx" file (local or remote configuration).
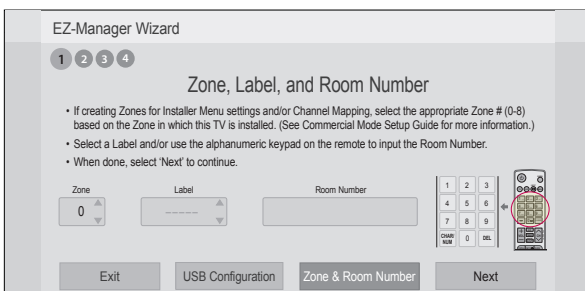
1. Complete the appropriate field(s) as described below. Use the Left/Right arrow keys on the Installer Remote to navigate between each of the fields.

   • Zone: Enables you to set a TV Zone # so that the TV can be configured with Installer Menu and/or TV Setup Menu settings intended only for the assigned Zone. The Installer Menu and/or TV Setup Menu settings may be provided in a Clone/Configuration (.tlx) file. If the TV is being configured for FTG Mode via CPU, the TV Zone # setting also allows the TV to omit channels that have been restricted in the FTG Channel Map.

   To change the TV Zone from its default value (0), navigate to the Zone field at the left of the screen, and use the Up/Down arrow keys to specify the desired TV Zone # (1–8).

   • Label: Allows you to select a North, South, East, or West text label for this TV. In the Label field, use the Up/Down arrow keys to select the applicable label.

   • Room Number: Allows you to specify the number of the room—up to 16 characters—in which the TV is located. In the Room Number field, you can use the number keys on the Installer Remote to direct enter a room number. Use the Dash key on the Installer Remote as necessary to toggle between number and letter characters in the Room Number field. Also, you can use the Flashback key on the Installer Remote to delete characters in this field.

2. When you are ready to continue, select the appropriate option, as follows:

   • To proceed to the next EZ-Manager screen, use the arrow keys to select **Next**, and then press **OK** on the Installer Remote. Continue to the "Configure Pro:Centric Settings" section on the following page.

   • To use a USB memory device in conjunction with the TV Manager / USB Download Menu to complete the configuration, continue to "USB Configuration" on page 18.
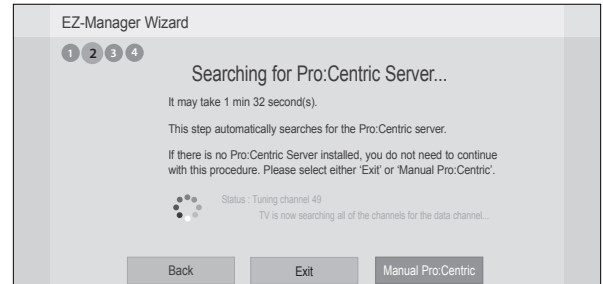
Configure Pro:Centric Settings

Once you select "Next" from the TV Configuration Options screen, the Searching for Pro:Centric Server screen is displayed (see example at right), and you have the following options:

- You can allow the EZ-Manager Wizard to proceed with a series of automated steps to configure the TV for Pro:Centric operation and then to look for the Pro:Centric application and maintenance (E-Z Installation) files to download. In this case, the wizard uses a search algorithm to determine the Data Channel and the Pro:Centric Application Mode to set in the TV.

  Continue with the "Automated Pro:Centric Configuration" sub-section below.

- If you already know the settings (i.e., Data Channel and Pro:Centric Application Mode) that need to be configured in order for the TV to connect to the Pro:Centric server and/or if the Pro:Centric server is not yet installed, you may expedite the setup process by entering this data manually.

  Continue with the "Manual Pro:Centric Configuration" subsection on the following page.

Automated Pro:Centric Configuration

Note: If the server is not yet configured on the system, use the manual configuration option to configure the Pro:Centric operation. See also note below.

Note: If Pro:Centric data delivery will be over IP and there is a DNS server at the site, you can create a "procentric.local" DNS entry for the Pro:Centric server that will enable automated Pro:Centric IP configuration via the EZ-Manager. If there is no DNS entry for procentric.local, you must use the manual configuration option to configure the Pro:Centric IP operation.

Once the Pro:Centric data channel is found (a Pro:Centric Server Was Found screen will be displayed) and the Pro:Centric Application Mode is determined, the wizard will advance to the Processing the Pro:Centric Configuration screen, which shows the progress of the data downloads (see example at right). Note that some steps may require a few minutes.

If the process is successful, no further user interaction is required, though, in some instances, where the option (for example "Next") is available, you may manually move forward to subsequent steps within the wizard to speed up the process.

EZ-Manager Wizard

① ② ③ ④

Searching for Pro:Centric Server...

It may take 1 min 32 second(s).

This step automatically searches for the Pro:Centric server.

If there is no Pro:Centric Server installed, you do not need to continue with this procedure. Please select either 'Exit' or 'Manual Pro:Centric'.

Status : Tuning channel 49
TV is now searching all of the channels for the data channel...

| Back | Exit | Manual Pro:Centric |

Note: Select the "Back" button, where available, to check previous settings, as necessary.

EZ-Manager Wizard

① ② ③ ④

Pro:Centric Server was found...

It may take 2 second(s).

The Pro:Centric data channel was found!! (Data Channel: 75, Mode: GEM)
The Download window will open in 2 second(s). You may wait or select 'Next'.
Otherwise, if you select 'Exit', the Pro:Centric server settings can be retained and used during the next download by selecting 'Save & Exit' in the Exit window.

Status : Tuning channel 75
The Pro:Centric data channel is found!!
(Data Channel: 75, Mode: GEM)

| Back | Exit | Next |

EZ-Manager Wizard

① ② ③ ④

Processing the Pro:Centric Configuration...

Downloading the maintenance files takes several minutes.
Please wait...

20%

Retrieving files from data channel 75

Application files   GEM app downloaded
Maintenance files   In progress...
– Updating Configuration File

Warning - Do not remove AC power or the signal cables during these steps

EZ-Manager Wizard (Cont.)

(Continued from previous page)

Note: If, after completing the search, the TV is unable to find the Pro:Centric data channel (while the Searching for Pro:Centric Server screen is on display), the wizard will stop and show a Diagnostics screen that enables you to manually return to the previous screen (to reinitiate the configuration) or exit the wizard.

When the Pro:Centric Configuration is complete, an EZ-Manager Configuration Complete screen is displayed, and after 10 seconds, the wizard exits, and the TV turns OFF.

Note: With the EZ-Manager Configuration Complete screen on display, you can also manually turn off or reboot the TV. If desired, select **Turn Off** or **Reboot**, respectively, and then press **OK** on the Installer Remote.

Manual Pro:Centric Configuration

1. With the Searching for Pro:Centric Server screen on display, use the arrow keys on the Installer Remote to select/highlight **Manual Pro:Centric** at the bottom right of the screen, and then press **OK**.

    In the Pro:Centric Manual Configuration screen (see examples at right below and on following page), you will be able to configure the appropriate Pro:Centric settings in the TV. Use the Up/Down arrow keys on the Installer Remote to navigate between fields.

2. In the Pro:Centric Mode field, use the Left/Right arrow keys to select the appropriate Pro:Centric Application Mode—FLASH, GEM, or Configuration Only.

    Note: For remote management only, select **Configuration Only**. The TV will search for TV E-Z Installation data downloads; however, Pro:Centric application data will not be downloaded, i.e., Installer Menu item 098 PRO:CENTRIC will be set to 0.

3. Refer to the appropriate subsection below, depending on the Pro:Centric server configuration, to complete the remaining fields.

    ### RF Configuration

    a) In the Media Type field, use the Left/Right arrow keys to select **RF**.

    b) In the Data Channel field, either key in or use the Left/Right arrow keys to select the RF channel number that will be used by the Pro:Centric server as its data channel. The Data Channel value can be set from 1 to 135. *
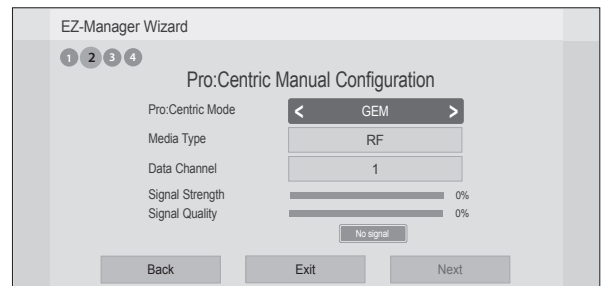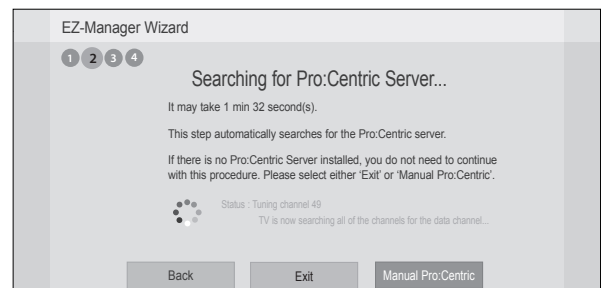
Pro:Centric Manual Configuration Screen with RF Media Fields

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* PCS150R and later Pro:Centric servers do not support HRC or IRC cable channel frequencies.

(Continued from previous page)

IP Configuration

a) In the Media Type field, use the Left/Right arrow keys to select **IP**.

Note: By default, the Pro:Centric Manual Configuration screen initially shows RF configuration fields. When you select "IP" as the Media Type, the Data Channel and Signal Strength/Quality fields are replaced with IP Address and Port fields.

b) In the Address and Port fields, either key in or use the Left/Right arrow keys to select the appropriate values for the Pro:Centric server IP address and port number.

The IP address must match the IPv4 multicast address and the port number must match the port number that is set in the Pro:Centric server.

4. Once all fields are completed as required, you have two options (see also note below):

• To save the data entered and exit the wizard, use the arrow keys to select **Exit** and then press **OK**. In the subsequent pop-up confirmation window, select **Save and Exit**, and then press **OK** once more. The Pro:Centric application and/or E-Z Installation data will be downloaded to the TV at a later time. This option is useful, in particular, if the Pro:Centric server has not yet been configured.

• To initiate a real-time download of Pro:Centric application and/or E-Z Installation data, use the arrow keys to select **Next**, and then press **OK**.

The EZ-Manager Wizard will proceed with the remaining Pro:Centric application and/or E-Z Installation data download steps, as shown on the Processing the Pro:Centric Configuration screen.

Note: With RF configuration, Pro:Centric server data must be present on the RF channel selected as the TV's Data Channel in order for you to select "Next" (you will see a "Data channel found" message below the Signal Quality indicator). With IP configuration, Pro:Centric server data must be present via the wired LAN cable connection in order for you to select "Next" (you will see a "IP server found" message below the Port field).

When the Pro:Centric configuration is complete, an EZ-Manager Configuration Complete screen is displayed, and after 10 seconds, the wizard exits, and the TV turns OFF.

Note: With the EZ-Manager Configuration Complete screen on display, you also have the option to manually turn off or reboot the TV. If desired, select **Turn Off** or **Reboot**, respectively, and then press **OK** on the Installer Remote.
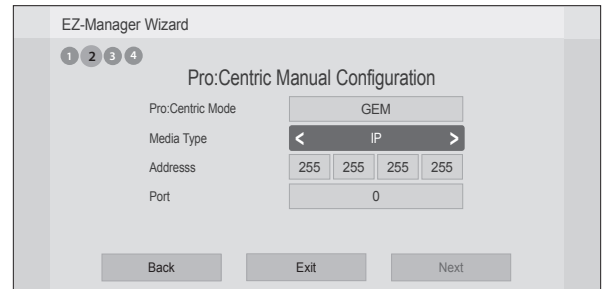
Pro:Centric Manual Configuration Screen with IP Media Fields
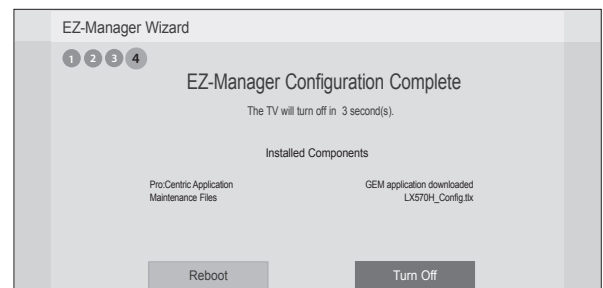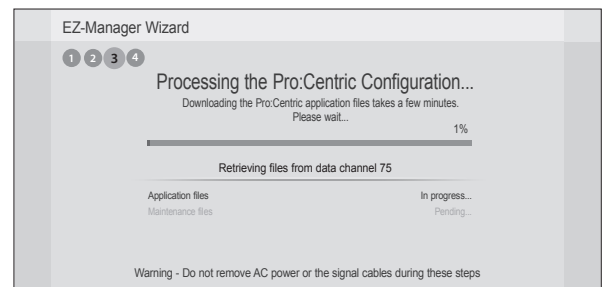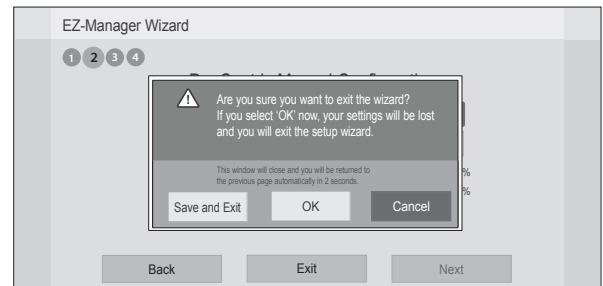
EZ-Manager Wizard (Cont.)

USB Configuration

The TV Manager / USB Download Menu provides options that enable you to download individual configuration or software files individually to the TV. You can also use the Ez Download utility available from the menu to select one of each type of file to be downloaded at one time using one process.

Each of the TV Manager / USB Download Menu functions requires that you have the appropriate file(s) loaded on a USB memory device. If you wish to perform a software update or download a splash screen image, the software/image file(s) must be stored in a folder named "LG_DTV" in the root directory of the USB device. Clone/Configuration (.tlx) files should simply be stored in the root directory of the USB device. The procedure below assumes that the desired file(s) is/are already loaded onto the USB device. For further information on TV Manager / USB Download Menu functions and file requirements, and/or for information on creating Clone or FTG Configuration (.tlx) files, refer to the appropriate section(s) in this document.

Before You Begin

- If you intend to use the Zoning feature on this TV, make sure to assign the appropriate TV Zone # in the EZ-Manager's Zone, Label, and Room Number screen BEFORE continuing with USB Configuration. See "TV Configuration Options" on page 13 for further information.
- Ensure the USB device to be used has been formatted with FAT format.
- When creating files to be downloaded, avoid using special characters (?, &, @, etc.) in filenames.
- Refer to "Ez Download Utility" on pages 19 to 21 for further information on the Ez Download utility.
- Refer to "Custom Master TV Setup" on pages 32 to 34 for information on creating a Clone (.tlx) file, and/or refer to "Creating an FTG Configuration File" on pages 39 to 40 for information on creating an FTG Configuration (.tlx) file for FTG Mode via CPU configuration.
- See Reference section, "Downloading a Splash Screen Image using a USB Memory Device," for splash screen image guidelines.
- See Reference section, "Updating TV/PTC Software using a USB Memory Device," for further information on software updates.

USB Configuration via EZ-Manager Wizard

With either the TV Configuration Options or the Zone, Label, and Room Number screen on display, proceed as follows to configure the TV using the USB memory device.

1. Insert the USB memory device with the appropriate file(s) into the TV's USB port.

2. Use the arrow keys on the Installer Remote to select **USB Configuration**, and then press **OK**. You will be redirected to the TV's TV Manager / USB Download Menu (see example at right).

3. Select the appropriate option from the TV Manager / USB Download Menu, and complete the download(s) as required.

   Note: If you perform a software update, the TV will complete the update and then reboot. Upon restart, the TV will display the EZ-Manager TV Configuration Options screen. If desired, you can re-access the USB Download Menu (to perform additional functions), proceed with configuration via the wizard, or exit the wizard.

4. Remove the USB memory device, and verify that the appropriate configuration/update(s) is/are resident on the TV.

TV Manager	
USB	Ez Download
Diagnostics	Logo Image Download
	Update TV Software
	Update PTC Software
	Import Clone File
↩ Previous	◉ OK

Note: You can press ↩ on the Installer Remote at any time to return to the EZ-Manager Wizard.

206-4278

The Ez Download utility, available from the TV Manager / USB Download Menu, enables you to select multiple files (one of each file type) at one time from the files loaded on a USB memory device. You may use this utility to download any one or all of the following to a TV: a Clone or FTG Configuration (.tlx) file, a TV CPU or PTC software update, a splash screen image.

Before You Begin

• Ensure the USB device has been formatted with FAT format.

• Software update and splash screen image files must be stored in a folder named "LG_DTV" in the root directory of the USB memory device. Clone/Configuration (.tlx) files should simply be stored in the root directory of the USB device.

• If the EZ-Manager Wizard appears on the screen when you turn ON the TV, you can use the wizard's "USB Configuration" option to access the Ez Download utility (see "TV Configuration Options" and/or "USB Configuration" on pages 13 and 18, respectively, as necessary).

• If the TV is currently in Pass-through Mode and you intend to use the TV Zoning feature for location-specific configuration purposes, make sure to assign the appropriate TV Zone # in the TV when directed to do so in the procedure below.

• When creating files to be downloaded, avoid using special characters (?, &, @, etc.) in filenames.

• Refer to "Custom Master TV Setup" on pages 32 to 34 for information on creating a Clone (.tlx) file, and/or refer to "Creating an FTG Configuration File" on pages 39 to 40 for information on creating an FTG Configuration (.tlx) file for FTG Mode via CPU configuration.

• See Reference section, "Downloading a Splash Screen Image using a USB Memory Device," for splash screen image guidelines.

• See Reference section, "Updating TV/PTC Software using a USB Memory Device," for further information on software updates.
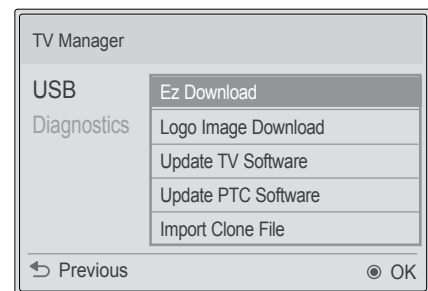
⚠ **Caution: Do not unplug the TV power cord or remove the USB memory device during a data download, as doing so may cause the TV to malfunction or harm the USB device, respectively.**

Accessing and Using the Ez Download Utility

1. If it is not ON already, turn ON the TV.

2. The next step depends on whether the EZ-Manager Wizard appears on the screen when you turn ON the TV:

   • If the wizard is displayed, you can access the Ez Download utility via the wizard, as indicated above (see "Before You Begin"). However, to continue with this procedure and access the Ez Download utility from the TV menus, exit the EZ-Manager Wizard. Then, continue with step 3.

   • If the wizard is not displayed, go directly to step 3.

3. If the TV is currently in Pass-through Mode, you would like to transfer (import) a ".tlx" file to the TV via the Ez Download utility, and you intend to use the TV Zoning feature, assign the appropriate TV Zone # in the TV at this time. See Reference section, "Using the TV Zoning Feature," for further information.

Ez Download Utility (Cont.)

(Continued from previous page)

⚠️ **Note: In order for the proper location-specific TV Zone profile data to be applied, the Zone designation must be assigned in the Target TV(s) BEFORE you continue with the Ez Download utility.**

4. Insert the USB memory device with the appropriate file(s) into the TV's USB port.

5. To access the TV Manager / USB Download Menu from the TV menus:

   • Press **MENU SETTINGS** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is not in Pass-through Mode).

   • Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number "**7**" key a total of seven times.

6. With the TV Manager / USB Download Menu on display (see example at right), use the Up/Down arrow keys to select **Ez Download**, and then press **OK**.

   The Ez Download utility screen contains a listing of the CPU (EPK), PTC, and LOGO (splash screen image) files stored in the LG_DTV folder and the Clone/Configuration (TLX) files stored in the root directory on the USB device.

   Note: Press ↩ on the Installer Remote, as necessary, to exit the Ez Download utility and/or the TV Manager / USB Download Menu. If you accessed the TV Manager via the EZ-Manager Wizard, you will be returned to the last screen on display before you selected the "USB Configuration" option. If you accessed the TV Manager via the TV menus, you will be returned to program viewing.

7. To select or de-select a file, respectively, use the Up/Down arrows on the Installer Remote to highlight the filename, and press **OK** to add or remove the checkmark at the left of the filename.

   Note: The utility will only allow you to select one of each file type for downloading. For example, if there are two TLX files in the Ez Download list, you can only select one or the other of those two files.

   Note: After the Ez Download utility is run, a file is automatically created and stored on the USB device that was used. The file, which will have a ".dzm" extension, maintains a history of the file(s) previously used with the Ez Download utility. The next time(s) you use this USB device with the Ez Download utility, the file(s) selected for the last download will be pre-selected for the current download.

8. The fields at the right of the screen will change depending on the currently highlighted file. Select the appropriate option(s) for each file, as applicable.

TV Manager

USB	Ez Download
Diagnostics	Logo Image Download
	Update TV Software
	Update PTC Software
	Import Clone File

↩ Previous   ◉ OK

Note: TV Manager / Diagnostics is for service use only.

Ez Download

☑ [TLX] xxLX570H-UA00001.TLX

☑ [LOGO] Splash Image 1920 X 1080 Pro

☑ [EPK] xxLX570H_V03_00_USB.epk

[TV Software Version]
Current : 03.00.12.01 (CPU)
1.00.008 (PTC)
EPK : 03.00.20.01

[Forced Update Option]
☐ SPI Boot
☐ LG Boot Logo

Apply

↩ Previous   ◉ OK

Updating EPK File... 50 %

Do not remove the USB from the port! Do not unplug!

xxLX570H-UA00001.tlx ✔
Splash Image 1920 x 1080 ProC.jpg ✔
xxLX570H_V03.00_USB.epk

(Continued on next page)

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- For software and splash screen image files: The fields at the right of the screen show the TV software versions and any available Forced Update options. Do not select any Forced Update options unless you have been specifically instructed to do so or have previous experience with Expert Software Updates.

- For TLX files: If an FTG Channel Map is included in the selected Clone/Configuration (.tlx) file, a Channel Tuning / Channel Banner Display field at the right of the screen enables you to choose the format for the channel tuning/banner display. Press the green ⬤⬤ button on the Installer Remote to select **Logical** tuning, or press the yellow ⬤⬤ button on the Installer Remote to select **Physical** tuning. A checkmark will appear at the left of the selected option. Logical tuning is selected by default.

  Note: If the selected TLX file does not include an FTG Channel Map, the message, "No Channel Map in TLX file," will be displayed at the right of the screen.

9. When you are ready to continue, use the arrow keys on the Installer Remote to select **Apply**, and then press **OK**.

   Update progress will be shown in a new window. Do NOT remove the USB device while updates are in progress. When the Ez Download process is complete, the TV will briefly display an overview of the results and then either return to program viewing or reboot (the latter if software has just been updated).

10. Remove the USB memory device, and verify that the appropriate configuration/update(s) is/are resident on the TV.

Note for TLX configuration: When configuration is complete, the TV tunes according to the Start Channel setting in the Installer Menu. If a Start Channel is specified, the TV will tune to that channel, though in the case of FTG Mode via CPU configuration, a channel banner will only be displayed if the Start Channel is included in the FTG Channel Map (depending on your selection in step 8, the channel banner will display either the Start Channel's logical channel number or physical RF channel number). Otherwise, the TV will either return to the last channel tuned (TV in Pass-through Mode) or tune to the first channel in the FTG Channel Map (TV in FTG Mode via CPU). In the latter case, remember that the channels in the FTG Channel Map are always arranged in logical order, regardless of your selection in step 8.

Installer Menu

Use the Installer Menu to set up, change, or view operational settings. This section describes how to access, use, and exit the Installer Menu from the TV itself. However, you should also refer to the Installer Menu descriptions in this document if you are configuring the TV CPU using an FTG Configuration (.tlx) file created using LG's FTG File Manager software or configuring the EBL locally (.rml) or remotely (via FMA-LG101 / .fma) using the FTG Device Configuration Application software.

Refer to the table on pages 24 and 25 for brief descriptions of Installer Menu items. More detailed descriptions follow the table listing.

Accessing the Installer Menu

1. Turn ON the TV.

   If the EZ-Manager Wizard appears on the screen when you turn ON the TV, exit the wizard.

2. Using an Installer Remote, press **MENU SETTINGS** repeatedly until the on-screen display of the TV setup menus (if the TV is in Pass-through Mode) or the Function Menu (if the TV is not in Pass-through Mode) no longer toggles, and then press the Installer Menu entry sequence (e.g., **9**-**8**-**7**-**6**) + **OK** to access the Installer Menu.

   Note: The default Installer Menu entry sequence is "9876"; however, if Installer Menu item 000 INSTALLER SEQUENCE has been modified, the entry sequence may be one of three additional options. See Installer Menu detailed descriptions for further information.

The Installer Menu opens with item 000 INSTALLER SEQ 000.

```
 ┌──────────────────────────────────────┐
 │  ┌────────────────────────────────┐  │
 │  │ xxLX570H  PTC  INSTALLER  MENU │  │
 │  │            CPU-CTV             │  │
 │  └────────────────────────────────┘  │
 │                                      │
 │  ┌────────────────────────────────┐  │
 │  │ 000  INSTALLER SEQ     000     │  │
 │  └────────────────────────────────┘  │
 │                                      │
 │  ┌────────────────────────────────┐  │
 │  │ UPN 000-000-000-000   ASIC D279│  │
 │  │ PTC V1.00.008    CPU V3.00.20.01│ │
 │  └────────────────────────────────┘  │
 └──────────────────────────────────────┘
      PTC Version      CPU Version
```
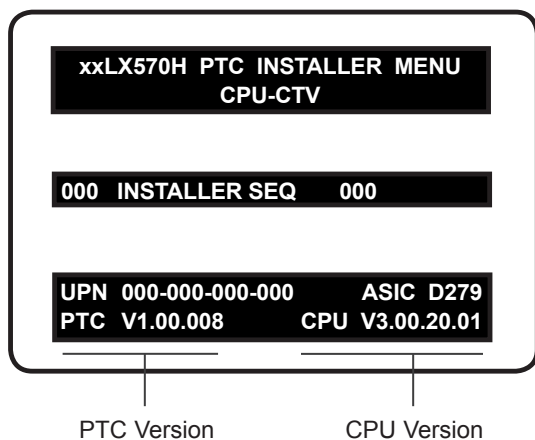
Typical Installer Menu

The Installer Menu header will vary depending on the TV you are setting up. In the Installer Menu footer, you can see the current software versions of the TV, as indicated.

Note: If the password (entry sequence) is not entered or registered correctly, you will see the message "ENTER PASSWORD 0000" at the top of the screen instead of the Installer Menu header. Once you re-enter the correct password (e.g., press 9-8-7-6 + OK), the Installer Menu will display.

Note: If the TV is not in Pass-through Mode, the Installer Menu is accessible as read-only. Also, the TV Zone # will be indicated in the Installer Menu header under the configuration mode indicator described on the following page.

As part of the Installer Menu header (in all modes), two 3-character acronyms are displayed to indicate the TV's current configuration mode. The table below lists all possible mode identifiers for these TV models.

Acronym	Description
CPU-CTV	Pass-through Mode with channel lineup in CPU
CPU-FTG	FTG Mode via CPU
CPU-P:C	Application Tuning Mode via CPU
EBL-FTG	FTG Mode via EBL
EBL-LNT	SONIFI PPV Mode
MPI-EXT	External MPI Control
PTC-CTV	Pass-through Mode with channel lineup in PTC

Using the Installer Menu

Refer to the table starting on the next page for an overview of the available Installer Menu items, including their item numbers, functions, value ranges, and default values.

Installer Menu items not relevant to these TV models are not present in the Installer Menu; therefore, some numbers are missing. For example, item 006 will not appear. In addition, items that are dependent on other Installer Menu item settings will not be initially accessible. For example, item 046 STRT AUX SRCE will not display in the Installer Menu unless item 004 STRT CHANNEL is set to 0. See Installer Menu detailed descriptions for further information.

Navigation within the Installer Menu

Use the Up/Down arrow keys on the Installer Remote to sequence through the available menu items, or access an item directly by keying in the item number and then pressing **MENU SETTINGS**. For example, to access the SLEEP TIMER option, which is item 015, press 0-1-5 + MENU SETTINGS.

Changing Installer Menu Settings

To change an Installer Menu item value, use the Left/Right arrow keys on the Installer Remote, or enter a valid value directly. To save the new setting, press **OK**, or use the Up/Down arrow keys to navigate to a new Installer Menu item if you have additional items to edit. Note that invalid values will not be saved.

Exiting the Installer Menu and Activating Settings

After you have adjusted all required Installer Menu item settings, press **OK** once on the Installer Remote to save your changes; then, press **OK** again to exit the Installer Menu. Any changes you make will be stored in non-volatile memory.

Note: Each time you exit the Installer Menu in Pass-through Mode, all V-Chip (Parental Control) settings in the TV are reset to their default values; that is, the Lock System, if previously enabled from the Lock setup menu, will now be disabled, and the individual Parental Control settings will be restored to default values.

Caution: Installer Menu settings may affect options available from the TV setup menus or the Function Menu.

Installer Menu Items 000 through 071

Item	Function	Value Range	Default Value	Brief Description of Function
000	INSTALLER SEQ	0 ~ 3	0	Leave default set to 0.
001	POWER MANAGE	0 ~ 7	0	Selects the number of hours of inactivity allowed before the TV automatically turns itself OFF. Set to 0 to disable power management.
002	AC ON	0 ~ 3	0	Set to 1 to enable TV to turn ON when AC power is applied. Set to 2 or 3 to enable Instant ON when AC power is applied. (See detailed descriptions.)
003	BAND/AFC	0 ~ 3	1	Selects Tuning Band: 0=Broadcast, 1=CATV, 2=HRC, 3=IRC
004	STRT CHANNEL	0 ~ 127, 255	255	Channel tuned when TV is turned ON. (Set to 255 to tune to channel tuned before TV turned OFF.)
005	CHAN LOCK	0 / 1	0	If set to 1, cannot tune from current channel.
007	STRT VOLUME	0 ~ 63, 255	255	Volume level when TV is turned ON. (Set to 255 to use volume level before TV turned OFF.)
008	MIN VOLUME	0 ~ 63	0	Sets minimum allowable volume setting.
009	MAX VOLUME	0 ~ 63	63	Sets maximum allowable volume setting.
010	MUTE DISABLE	0 / 1	0	Set to 1 to disable Mute Function.
011	KEY DEFEAT	0 / 1	0	If set to 1, joystick button menu navigation functions on display panel are not available.
015	SLEEP TIMER	0 / 1	1	Set to 1 to enable Sleep Timer.
016	EN. TIMER	0 / 1	0	Set to 1 to enable On/Off Timers.
017	ALARM	0 / 1	1	Set to 1 to enable Alarm.
020	FEATURE LEVEL	0, 16 ~ 24	0	Determines an additional IR code scheme to which the TV will respond.
021	V-CHIP	0 / 1	1	Set to 1 to enable V-Chip (Parental Control) functions.
022	MAX BLK HRS	0 ~ 99	12	Sets number of V-Chip blocking hours.
023	CAPTION LOCK	0 / 1	0	Set to 1 to retain caption setting set before TV turned OFF.
028	CH. OVERIDE	0 / 1	1	If set to 0, user access to channel settings in the TV setup menus is restricted and users can only tune to channels that are included in the channel lineup.
029	OLD OCV	0 / 1	0	Set to 1 to remap the PTC's direct tune channels for Aux inputs from 13x to 9x.
030	ACK MASK	0 / 1	0	If set to 1, enables ACK feature of MPI.
031	POLL RATE	20 ~ 169	94	Selects poll rate for MPI.
032	TIMING PULSE	186 ~ 227	207	Sets baud rate for MPI.
035	HDMI1 ENABLE	0 ~ 2	1	Set to 0 to disable HDMI 1. Set to 1 (DTV Mode) or 2 (PC Mode), as applicable, to enable HDMI 1.
039	REAR AUX EN.	0 / 1	1	Set to 1 to enable display panel Video 1 input jack.
041	SIMPLINK EN	0 ~ 3	0	Determines the status of the SIMPLINK feature. (See detailed descriptions.)
042	AUTO INPUTS	0 ~ 255	0	Determines the Aux inputs for which auto-sensing is enabled. (See detailed descriptions.)
046	STRT AUX SRCE	1, 3 ~ 5, 7, 255	255	Sets the starting Aux source (if item 004 STRT CHANNEL is set to 0).
047	AUX STATUS	0 / 1	0	Set to 1 for MPI Aux source to be reported as a channel number instead of Channel 0.
053	DIS. CH-TIME	0 / 1	0	Set to 1 to disable Channel-Time display.
069	EN. CH-T COL.	0 / 1	1	Set to 1 to enable custom color for the Channel-Time display.
070	FOR. CH-TIME	0 ~ 7	2	Chooses custom foreground color for the Channel-Time display.
071	BCK. CH-TIME	0 ~ 7	2	Chooses custom background color for the Channel-Time display.

Installer Menu Items 073 through 122

Item	Function	Value Range	Default Value	Brief Description of Function
073	CH NOT AVBLE	0 / 1	0	If set to 1 and item 028 CH. OVERIDE is set to 0, a "CHANNEL NOT AVAILABLE" message is displayed if user attempts to direct tune a channel that is not included in the channel lineup.
075	REVERT CH	0 / 1	0	If set to 1 and loss of MPI communication occurs, TV tunes to Start Channel.
078	UPN MSB	0 ~ 255	0	User programmable number, most significant byte.
079	UPN MSB-1	0 ~ 255	0	User programmable number, most significant byte - 1.
080	UPN MSB-2	0 ~ 255	0	User programmable number, most significant byte - 2.
081	UPN LSB	0 ~ 255	0	User programmable number, least significant byte.
082	CHKSM ERROR	0 / 1	1	Enforces rigid MPI checksum.
083	HANDSHK TIME	0 ~ 5	5	Relaxes MPI timing to be compatible with PC-based Windows-controlled systems.
084	PERMANENT BLK	0 / 1	0	Removes block hours setting for Parental Control and makes block permanent.
086	V. MUTE TIME	0 ~ 50	0	Use to extend the normal video mute time during channel change.
087	REAR RGB EN.	0, 1, 17	1	Dependent on item 093 RJP AVAILABLE setting. Set to 0 to disable RGB input. Set to 1 to enable RGB input. Set to 17 for Auto Configure.
088	EN NOISE MUTE	0 / 1	1	(Analog channels only) If set to 1, audio is muted if no signal is present.
090	KEY LOCK	0 / 1	0	If set to 1, all display panel joystick button functions are locked. IR is still functional.
091	HDMI2 ENABLE	0 ~ 2	1	Set to 0 to disable HDMI 2. Set to 1 (DTV Mode) or 2 (PC Mode), as applicable, to enable HDMI 2.
092	HDMI3 ENABLE	0 ~ 2	1	Set to 0 to disable HDMI 3. Set to 1 (DTV Mode) or 2 (PC Mode), as applicable, to enable HDMI 3.
093	RJP AVAILABLE	0, 1, 2, 5, 6	0	Set to 0 to disable. Set to 1, 2, 5, or 6 for HDMI or DVI Mode. (See detailed descriptions.)
094	SAP MENU EN	0 / 1	1	Set to 1 to enable SAP feature in Function Menu.
096	DEF. ASP. RATIO	0 ~ 4	2	Sets default aspect ratio at power up. See detailed descriptions and item 106.
097	AUDIO OUTPUT	0 ~ 9	7	Set as required in accordance with external audio equipment connected to the TV. See detailed descriptions.
098	PRO:CENTRIC	0 ~ 2	0	Set to 0 to disable Pro:Centric operation. Set to 1 for Flash Mode. Set to 2 for GEM (Java Application) Mode.
099	BACK LIGHTING	1 ~ 200, 255	255	Sets the level of the TV picture back lighting. (See detailed descriptions.)
102	ATSC BAND	0 ~ 4	4	Selects ATSC band.
103	ATSC TUNE MODE	0 / 1	1	Set to 1 (default) for Physical Channel scan. Set to 0 for Virtual Channel scan.
104	START MINOR CH	0 ~ 255	0	Selects Minor Start Channel. Set to 0 for NTSC.
106	ASP RATIO LOCK	0 / 1	0	To retain set aspect ratio on power cycle, set to 1. Set to 0 for default ratio on power cycle.
116	VIDEO MUTE EN	0 / 1	0	(Analog channels only) If set to 1, video mutes (blank screen) when no signal is present.
117	FACT DEFAULT	0 / 1	0	Set to 1 to restore the factory default settings of all Installer Menu items.
118	POWER SAVINGS	1, 3, 7	3	Determines the powered status of the embedded b-LAN module and the GAME CONTROL/MPI port. (See detailed descriptions.)
119	DATA CHANNEL	0 ~ 135, 253, 255	255	Set to 0 to disable. Set from 1 to 135 to match the RF channel number used by the Pro:Centric server as its data channel. Set to 255 to use Auto Search to find the Pro:Centric RF channel. (See detailed descriptions.)
121	UPDATE TIME HR	0 ~ 23, 128	128	Sets the Wake For Update hour. The value "128" is displayed as "OFF." Directly entering 128 turns the Wake For Update feature OFF.
122	UPDATE TIME MN	0 ~ 59	0	Sets the minute for Wake For Update.

Detailed Descriptions of Installer Menu Items

000 - INSTALLER SEQUENCE
Specifies entry sequence to the Installer Menu.

0 = 9876	1 = 4321
2 = 1478	3 = 3698

001 - POWER MANAGE (Power Management)
Energy saving feature. Determines the number of hours, in the range 1 to 7, of inactivity allowed, either at the TV control panel or from the remote, before the TV automatically turns itself OFF. If set to 0, Power Management is disabled.

002 - AC ON (AC Power Switchable)
If set to 1, this allows the TV to turn ON when AC power is applied. Pressing the POWER button is not necessary. This is desirable if the TV is plugged into a switched AC outlet (i.e., a set-top box). Set to 2 or 3 to enable the Instant ON feature (see additional information below). Set to 0 (default) for standard TV turn ON/OFF operation.

The Instant ON feature allows the TV to turn ON when AC power is applied, but with video and audio muted (Muted ON). The TV retains its ON status while appearing to be OFF. Pressing the POWER button toggles Off/On the video and audio mutes, so that the TV appears to turn ON instantly.

• If this item is set to 2, the TV will reboot and, if applicable (i.e., item 119 DATA CHANNEL set from 1 to 135 or 253), check for and download any available updates from the Pro:Centric server at every turn OFF. This setting is not recommended if the TV will be configured with a resident application.

• If this item is set to 3, the TV will not reboot to check for and download updates at turn OFF, with the following exception: the first time the TV is turned OFF after this item is set to 3, the TV will reboot and initiate an update event (Data Channel Auto Search and/or check for and download of updates—see also paragraph below). This setting is recommended if the TV will be configured with a resident application. In this mode, the standard check for and download of updates is under application control. Refer to your site-specific documentation for further information on configuring the TV with a resident application.

When this item is set to 2 or 3, the TV also will reboot and initiate an update event once every 24 hours. During the update event, the TV, as applicable, performs a Data Channel Auto Search (item 119 set to 255) and/or checks for and downloads any available updates from the Pro:Centric server (item 119 DATA CHANNEL set from 1 to 135 or 253). The time at which this event occurs depends on the setting of item 121 UPDATE TIME HR. See item 119 and 121 descriptions for further information. Once the update cycle is complete, the TV completes the reboot and resumes its Muted ON state.

Note: If set to 1, the TV does not respond to ON/OFF commands from either the remote or the display panel, and the SLEEP TIMER is also nonfunctional.

003 - BAND/AFC (Band/Automatic Frequency Control)
There are four possible settings for this option:

0 = Broadcast	1 = CATV (default)
2 = HRC	3 = IRC

If some channels were not found by Auto Tuning (Channel Search), select the appropriate Band setting here, and add the channels using the Channel Edit option in the Channel Menu.

004 - STRT CHANNEL (Start Channel)
If active, this function allows you to determine the initial Major Start Channel number when the TV is turned ON. This feature is useful for an in-house information channel, since the TV would always select that channel when it is turned ON. If set to 255, the last channel tuned before the TV was turned OFF will be the channel tuned when the TV is turned ON again.

0 = Aux	127 = Map to Major CH 4
1 ~ 125 = Major CH #	255 = Last Channel
126 = Map to Major CH 3	

Note: For a digital Start Channel, always remember to set item 104 to the Minor Start Channel number.

Note: 126 and 127 are mapped only in SONIFI PPV Mode.

005 - CHAN LOCK (Channel Lock)
Channel Lock is ideal if the system must always be on the same channel. Changing channels with the Channel Up/Down or keypad numbers is impossible. Channel Lock is inactive if set to 0 (default).

Generally, this feature is used in connection with item 004 STRT CHANNEL where the Start Channel may, for example, be set to 3 or 4. If the Start Channel is 3, then the TV will remain locked on channel 3.

NOTE: For items 007, 008, and 009
For legacy reasons, the scale used is 0 – 63. The PTC software will translate this to the 0 – 100 scale used by the TV.

To translate a TV volume level to the Installer Menu value, use the following formula:

$$\text{Installer Value} = \frac{\text{TV Value x 63}}{100}$$

Enter only the whole number (disregard fractions).

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007 - STRT VOLUME (Start Volume)
This function allows the Installer to determine the initial volume level setting when the TV is turned ON. This feature is useful for an in-house information channel, since the TV will always select that volume level when it is turned ON. The range of values is 0 to 63, 255. If set to 255, the last volume level before the TV was turned OFF will be the current volume level when the TV is turned ON again.

008 - MIN VOLUME (Minimum Volume)
This function determines the minimum volume level allowable with the Volume (VOL) Up/Down control. In this way, for example, someone cannot set the volume too low to hear. The value range is from 0 to 63. The factory default is 0, which provides the full range of volume control, if item 009 MAX VOLUME is set to 63. It is recommended to set the same value on every TV.

Note: The minimum volume level cannot have a value setting higher than the maximum volume level (described below).

009 - MAX VOLUME (Maximum Volume)
This function determines the maximum volume level allowable with the Volume (VOL) Up/Down control. In this way, for example, someone cannot set the volume level high enough to disturb others. The value range is 0 to 63, with 63 as the default, which gives the user the full range of volume control, if item 008 MIN VOLUME is set to 0. It is recommended to set the same value on every TV.

Note: The maximum volume level cannot have a value setting lower than the minimum volume level (described above).

010 - MUTE DISABLE
Enables or disables sound mute function. If set to 1, sound cannot be muted. If set to 0, sound can be muted.

011 - KEY DEFEAT
If set to 1, Key Defeat is enabled, which means that end users cannot access or navigate within the on-screen menu(s) from the display panel; i.e., joystick button menu navigation functions will not be available. Set to 0 to disable Key Defeat. Note that all IR features remain functional regardless of this setting; users can always access the TV menus by pressing MENU SETTINGS on the remote.

015 - SLEEP TIMER
If set to 1, the Sleep Timer feature may be used. If set to 0, the Sleep Timer is not available.

016 - EN. TIMER (Enable On/Off Timers)
If set to 1, the Timer function is available to the end user and enabled continuously. Set to 0 to disable On/Off timers.
Note: The TV clock must be set in order for timers to be used.

017 - ALARM
Gives the installer the option of making the Alarm function available to the end user. If set to 1, the Alarm function is available to the end user. Set to 0 to disable the Alarm function.
Note: The TV clock must be set before the Alarm function will work.

020 - FEATURE LEVEL
Determines an additional IR code scheme to which the TV will respond, allowing for the use of unique IR codes based on "bed number" in a multi-TV single room installation. First determine the IR mode; then select the bed number.

Values	IR Mode	Bed #
0	Disabled	N/A
16 – 24	Multi-code Remote	1 – 9

Note: For further information, see documentation for the accessory package that includes the multi-code remote.

021 - V-CHIP (Parental Control)
Set to 1 to activate V-Chip (Parental Control) and have it available to the end user to filter and control or otherwise restrict programming content that can appear. Set to 0 to turn the V-Chip feature Off (not available to user); no programming restrictions can be set.

022 - MAX BLK HRS (Maximum Block Hours)
Sets hours from 0 to 99 for the maximum V-Chip (Parental Control) block hours. Default setting is for 12 blocking hours.
Note: This item is not available in the Installer Menu when item 021 V-CHIP is set to 0 or when item 084 PERMANENT BLK is set to 1.

023 - CAPTION LOCK
If set to 0, captions are OFF when the TV is turned ON. Set to 1 to use the caption setting configured before the TV was turned OFF when the TV is turned ON.

028 - CH. OVERIDE (Channel Override)
Applicable for Pass-through Mode only. If set to 1, users can select channels either with Channel Up/Down or by direct keypad entry. This setting also allows full access to channel settings in the TV setup menus (i.e., channels may be added or removed from the channel lineup, channel labels and icons may be edited, etc.). If set to 0, the channel lineup is locked. That is, user access to channel settings in the TV setup menus is restricted, and users can only tune to the channels that are included in the channel lineup. Also, in this case, users can only select channels using Channel Up/Down; direct keypad entry is not available.

029 - OLD OCV (On Command Video™)
Set to 1 to remap the PTC's direct tune channels for Aux inputs from 13x to 9x. This allows 2-digit only tuning systems (i.e., legacy OCV) to direct tune Aux inputs. See also Reference section, "TV Aux Input Configuration."

030 - ACK MASK
MPI Communication Parameter. When set to 1, enables ACK feature of MPI.

031 - POLL RATE
MPI Communication Parameter. Selects poll rate for MPI. Step size of 16 ms. Changing from default may affect communication via MPI.

032 - TIMING PULSE
MPI Communication Parameter. Sets baud rate for MPI. Step size of 4.3 uS. Changing from default may affect communication via MPI.

035 - HDMI1 ENABLE
Set to 1 to enable HDMI 1 input in DTV Mode. Set to 2 to enable HDMI 1 input in PC Mode. Set to 0 to disable display panel HDMI 1 input.

Note: This setting is ignored if item 093 RJP AVAILABLE is set to 1.

039 - REAR AUX EN. (Rear Aux Enable)
Set to 1 to enable display panel rear Aux (Video 1) input. Set to 0 to disable display panel rear Aux (Video 1) input.

041 - SIMPLINK EN
Set to 0 to disable the SIMPLINK feature. Set to 1 to enable SIMPLINK functionality without enabling remote control access to the SIMPLINK Menu. Set to 2 to enable both SIMPLINK functionality and SIMPLINK Menu access, though note that the Speaker menu option will be inaccessible/grayed out. Set to 3 to enable all aspects of SIMPLINK feature and SIMPLINK Menu. If a home theater device is connected to the TV, users can select either the TV or HT (home theater) speaker.

Note: When both this item *and* item 042 AUTO INPUTS are enabled in the Installer Menu, HDMI inputs will be detected by SIMPLINK, but the Auto Input(s) Sensing Feature will not function.

042 - AUTO INPUTS
Determines the Aux inputs for which auto-sensing is enabled. Set to 0 to disable auto-sensing for all available inputs. Set to 255 to enable auto-sensing for all available inputs. For information on options for individual input settings, see Reference section, "Auto Input(s) Sensing Feature."

Note: In order for auto-sensing to be enabled for an input, that input must also be enabled in the Installer Menu. For example, to enable auto-sensing for HDMI 1, item 035 HDMI1 ENABLE must also be set to 1 or 2. Also, see note above regarding TV operation when both this item and item 041 SIMPLINK EN are enabled.

Note: When this item is enabled in the Installer Menu, item 093 RJP AVAILABLE is automatically set to 0.

046 - STRT AUX SRCE (Start Aux Source)
Sets the starting Aux source. When turned ON, the TV will tune to starting Aux source if item 004 STRT CHANNEL is set to 0.

1 = Video 1	4 = RGB	7 = HDMI 3
3 = HDMI 1	5 = HDMI 2	255 = Last Aux

Note: Above is applicable only if all Aux sources are enabled.

Note: This item is not available in the Installer Menu unless item 004 STRT CHANNEL is set to 0.

047 - AUX STATUS
Set to 1 for MPI Aux source to be reported as a channel number instead of channel 0. Set to 0 to disable Aux identification change. Controls MPI status channel response for Aux inputs.

053 - DIS. CH-TIME (Disable Channel-Time)
Set to 1 to disable the Channel-Time display; Channel-Time display will not appear. Set to 0 to enable the Channel-Time display.

069 - EN. CH-T COL. (Enable Channel-Time Custom Color)
Set to 1 to enable custom color for the Channel-Time display. Set to 0 to disable custom color for the Channel-Time display.

070 - FOR. CH-TIME (Channel-Time Display Foreground Color)
Set according to Color Chart:

0 = Black	3 = Cyan	6 = Yellow
1 = Blue	4 = Red	7 = White
2 = Green	5 = Violet	

Note: If foreground color and background color are the same, the menu background will be transparent.

Note: Applies only to "Channel Not Available" message if item 073 CH NOT AVBLE is set to 1 (enabled). Also, items 070 FOR. CH-TIME and 071 BCK. CH-TIME are not available in the Installer Menu when item 069 EN. CH-T COL. is set to 0.

071 - BCK. CH-TIME (Channel-Time Display Background Color)
See description for item 070 FOR. CH-TIME above. The color chart is the same for both items.

073 - CH NOT AVBLE (Channel Not Available)
If set to 1 and item 028 CH. OVERIDE is set to 0, a "CHANNEL NOT AVAILABLE" message is displayed when a user attempts to direct tune a channel that is not included in the channel lineup.

Note: This item is not available in the Installer Menu when item 028 CH. OVERIDE is set to 1.

075 - REVERT CH (Revert to Start Channel)
If set to 1 and loss of MPI communication occurs, TV automatically tunes to the specified Start Channel.

Note: This item is not available in the Installer Menu when item 004 STRT CHANNEL is set to 255.

078 - UPN MSB (UPN Most Significant Byte)
User programmable number, most significant byte readable by MPI command. Note: Not linked to serial number.

079 - UPN MSB-1 (UPN Most Significant Byte-1)
User programmable number, most significant byte-1 readable by MPI command. Note: Not linked to serial number.

080 - UPN MSB-2 (UPN Most Significant Byte-2)
User programmable number, most significant byte-2 readable by MPI command. Note: Not linked to serial number.

081 - UPN LSB (UPN Least Significant Byte)
User programmable number, least significant byte readable by MPI command. Note: Not linked to serial number.

082 - CHKSM ERROR (Checksum Error)
Enforces rigid MPI checksum validation. Set to 1 for validation.
Set to 0 to disable (does not check checksum on MPI async port).
SPI is always checked.

083 - HANDSHK TIME (Handshake Time)
Adds an additional delay to the handshake time which is 64 msec,
thus relaxing MPI timing requirements to be compatible with PC-
based Windows controlled systems. Range is 0 - 5.
(Timeout = 25.5MS + [25.5 MS* Handshake time].)

084 - PERMANENT BLK (Permanent Block)
Allows Lock (Parental Control) blocking schemes to be permanent
by disabling the blocking hours function. Set to 1 to install Parental
Control restrictions permanently. Set to 0 for user-specified hours
control of blocking schemes.

Note: This item is not available in the Installer Menu when item
021 V-CHIP is set to 0.

086 - V. MUTE TIME (Video Mute Time)
Use to extend the normal video mute time during channel change.
For example, you may wish to extend the normal video mute time
to prevent the display of encrypted video (i.e., from a Pro:Idiom
encrypted channel) that has not yet been decrypted. When set to
0, the normal video mute time is not extended. Set from 1 to 50 to
increase the normal video mute time in 100 ms step increments up
to a maximum of 5 seconds (e.g., the value of 25 represents 2.5
seconds, or 25 x 100 ms = 2.5 seconds).

087 - REAR RGB EN. (Rear RGB Enable)
Controls access to rear RGB input on TV. Set to 0 to disable RGB
input. Set to 1 to enable RGB input. Set to 17 to initiate a one-
time automatic configuration after an AC power cycle; otherwise,
automatic adjustment will be performed each time the RGB input
is accessed.

088 - EN NOISE MUTE (Enable Noise Mute)
Applicable for analog channels only. If set to 1, audio mutes if no
signal is present.

090 - KEY LOCK
If set to 1, Key Lock is enabled, which means that all display panel
joystick button functions will be locked, i.e., non-functional. Set to
0 to disable Key Lock. Note that all IR features remain functional
regardless of this setting.

091 - HDMI2 ENABLE
Set to 1 to enable HDMI 2 input in DTV Mode. Set to 2 to enable
HDMI 2 input in PC Mode. Set to 0 to disable display panel HDMI
2 input.

092 - HDMI3 ENABLE
Set to 1 to enable HDMI 3 input in DTV Mode. Set to 2 to enable
HDMI 3 input in PC Mode. Set to 0 to disable display panel HDMI
3 input.

093 - RJP AVAILABLE (Remote Jack Pack Available)
• 0 = Remote jack pack is not available or disabled.

• 1 = Legacy Model RJPs: HDMI Mode
Enables RJP feature for use with full cable bundle models. In
this mode, when an HDMI source is connected to the RJP, both
digital video and audio are expected via the HDMI cable. If no
digital audio is present, no audio will be heard.

• 2 = Legacy Model RJPs: DVI Mode
Enables RJP feature for use with full cable bundle models. In
this mode, when an HDMI/DVI source is connected to the RJP,
only digital video is expected via the HDMI cable. Analog audio
is provided via a separate cable, from the source, connected to
an RJP AUDIO IN. If no analog audio cable is connected, tuner
audio will be heard.

• 5 = Scaler Model RJPs: HDMI Mode
Enables RJP feature for use with reduced cable bundle models.
In this mode, when an HDMI source is connected to the RJP,
both digital video and audio are expected via the HDMI cable. If
no digital audio is present, no audio will be heard.

• 6 = Scaler Model RJPs: DVI Mode
Enables RJP feature for use with reduced cable bundle models.
In this mode, when an HDMI/DVI source is connected to the RJP,
only digital video is expected via the HDMI cable. Analog audio
is provided via separate cable, from the source, connected to
an RJP AUDIO IN. If no analog audio cable is connected, tuner
audio will be heard.

Note: See also Reference section, "RJP Model List & Input Auto-
sensing Hierarchy." Settings 1, 2, 5, and 6 allow the lodge staff to
customize each TV's RJP setup based on customer requirements.

Note: When this item is enabled in the Installer Menu, item 042
AUTO INPUTS is automatically set to 0.

094 - SAP MENU EN (2nd Audio Program)
Set to 1 to enable the SAP feature in the Function Menu, when
the Function Menu is available (i.e., TV is not in Pass-through
Mode). Set to 0 to disable the SAP feature in the Function Menu,
when the Function Menu is available.

096 - DEF. ASP. RATIO (Default Aspect Ratio)
Selects default aspect ratio at power up:

0 = Set By System	1 = 4:3
2 = 16:9 (default)	3 = Just Scan
4 = Zoom	

Note: This item is not available in the Installer Menu unless item
106 ASP RATIO LOCK is set to 0.

097 - AUDIO OUTPUT
Determines availability and signal type/level (fixed speaker, variable speaker, or fixed line level [amplifier]) of the audio output to be used by external audio equipment connected to the SPEAKER OUT / LINE OUT jack on the TV. Set to 0 to disable audio output. Otherwise, see the table below and set as required in accordance with audio equipment. See also Reference section, "External Stereo Speaker Specifications."

	Value	Status
Speaker Output	1	Fixed 0.01 Watts
	2	Fixed 0.03 Watts
	3	Fixed 0.05 Watts
	4	Fixed 0.10 Watts
	5	Fixed 0.20 Watts
	6	Fixed 0.50 Watts
	7	Fixed 1.00 Watt (default)
	8	Control with volume
Line Output	9	Fixed line level (typically 400 mVrms ± 100 mVrms @10KΩ) output

098 - PRO:CENTRIC
Selects the Pro:Centric Application Mode. Set to 0 (default) to disable the Pro:Centric application. Set to 1 for Flash Mode. Set to 2 for GEM (Java Application) Mode.

The TV must be turned OFF for a few seconds to initiate the Pro:Centric application download. When the TV is turned back ON, it may take several minutes to load the Pro:Centric application after the initial download.

Note: This item is not available in the Installer Menu when item 119 DATA CHANNEL is set to 0.

099 - BACK LIGHTING
Sets the TV screen brightness at power up. Default setting is 255.

• 1 - 100 Static Back Lighting
  (1 = Dimmest picture, 100 = Brightest picture)
• 101 - 200 Dynamic Back Lighting
  (101 = Dimmest picture, 200 = Brightest picture)

If set between 101 and 200, the TV automatically controls back lighting depending upon the picture level of the current program. If set to 255, back lighting is controlled via the Picture settings in the TV setup menus.

102 - ATSC BAND
Sets up TV to receive different types of incoming signals.

0 = Broadcast   1 = CATV   2 = HRC
3 = IRC   4 = Same as NTSC

103 - ATSC TUNE MODE
Sets ATSC tuning mode. Default set to 1 for Physical Channel scan. Set to 0 for Virtual Channel scan.

104 - START MINOR CHANNEL
Sets Minor Start Channel number at power up. 0 = NTSC. If not 0, number selected is the digital channel's Minor Start Channel number.

Note: This item is not available in the Installer Menu when item 004 STRT CHANNEL is set to 0 or 255.

106 - ASP RATIO LOCK (Aspect Ratio Lock)
Set to 1 to retain previous aspect ratio with power off. Set to 0 to retain default aspect ratio with power off. See item 096 DEF. ASP. RATIO above.

116 - VIDEO MUTE EN (Video Mute Enable)
Applicable for analog channels only. If set to 1, video mutes (blank screen) when no signal is present.

117 - FACT DEFAULT (Factory Default)
Set to 1 and press OK to restore the factory default settings of all Installer Menu items. Once complete, the value returns to 0.

⚠ **Caution: If set to 1, this clears all Installer Menu custom settings and restores the factory default settings. It also clears the channel lineup, including any assigned channel icons and custom text labels.**

Note: See also Reference section, "Restoring Factory Defaults on the TV(s)," for further information.

118 - POWER SAVINGS
Default set to 3—the power circuitry for both the embedded *b*-LAN module and the GAME CONTROL/MPI port is only powered when the TV is turned ON. When the TV is turned OFF, the embedded *b*-LAN and the GAME CONTROL/MPI port are not powered.

Note that the TV must be turned ON in order to communicate with the embedded *b*-LAN module for configuration and control when POWER SAVINGS is set to 3. If POWER SAVINGS is set to 1, the *b*-LAN module is always powered.

Similarly, if MPI communication is required for external MPI control, POWER SAVINGS should be set to 1 so that the GAME CONTROL/MPI port circuitry is always powered.

Note: See Reference section, "*b*-LAN Setup & Overview," for further information.

⚠ **Caution: POWER SAVINGS should NEVER be set to 7. This setting is intended for factory use only.**

119 - DATA CHANNEL

Set to 0 to disable. Set from 1 to 135 to match the RF channel number that will be used by the Pro:Centric server as its data channel.*

For TVs in Pass-through Mode or FTG Mode via CPU, if this item is left at its default value (255), the TV's Data Channel Auto Search feature will be enabled (see additional information below).

Note: The Data Channel Auto Search feature is not available when the TV's EBL is in FTG Mode. If the DATA CHANNEL value is 255 when the TV is configured for FTG Mode via EBL, DATA CHANNEL is defaulted to 0.

Data Channel Auto Search feature: When this item is set to 255 (default), once every 24 hours, the TV will initiate a search of 10 predefined channels (10, 20, 30, ... 100) and then, if necessary, perform a complete search of the RF channels (1 to 135) in an attempt to find the RF channel used by the Pro:Centric server as its data channel. If the Pro:Centric RF channel is found, the DATA CHANNEL value will be changed from 255 to match the server's RF channel number. The time at which the Auto Search occurs depends on the setting of item 121 P:C RF WAKE HR. See item 121 description for further information.

Note: Pro:Centric application updates are downloaded from the Pro:Centric server to the TV when the TV is turned ON; however, TV E-Z Installation updates are downloaded to the TV when the TV is turned OFF. While E-Z Installation updates are in progress, it is not possible to turn ON the TV.

Note: The Data Channel is automatically set to "253" if Media Type is set to "IP" either in the EZ-Manager Wizard or in the IP Environment / Pro:Centric Menu on the TV (see "EZ-Manager Wizard" on pages 12 to 18 or "Pro:Centric Setup" on pages 47 to 48, respectively) or if Installer Menu item #119 Data Channel is set to "IP Address" in the FTG File Manager, which is used to configure TV CPUs for FTG Mode operation. It is not possible to change the value to "253" directly in the Installer Menu.

121 - UPDATE TIME HR

Based on the settings of this item and item 122 UPDATE TIME MN, the Wake For Update feature wakes the TV once daily to check for and, if applicable, download updates from the Pro:Centric server.

Set the Wake For Update hour from 0 to 23. This item uses the 24-hour clock format. The value "128" (default) is displayed as "OFF." Directly entering 128 resets the default value (OFF) for this item, though note that this setting does not mean the TV will not initiate update events—see additional information below.

Under standard TV OFF/ON operating conditions (i.e., item 002 AC ON is set to 0), a Wake For Update event occurs when the TV is OFF and causes the TV's CPU to temporarily turn ON, perform the update cycle, and then turn back OFF, all while the TV appears to be OFF. If item 002 AC ON is set to 2 or 3 for Instant ON, then the TV's CPU is always ON and Wake For Update occurs when the TV is in its Muted ON state (i.e., the TV only appears to be OFF). The Wake For Update event causes the TV's CPU to reboot in order to perform the update cycle and then return to its Muted ON state. See also description for item 002.

If this item is set to 128 (OFF), the time at which a Data Channel Auto Search (item 119 set to 255) and/or an Instant ON update (item 002 set to 2 or 3) occurs is determined as follows: The TV initiates the search and/or checks for updates at 2:00 AM (if the TV clock is set) or after two hours of elapsed time from when AC power was applied (if the TV clock is not set). If the TV display is ON when a Wake For Update event is to occur, the update will take place the next time the TV is turned OFF.

Note: This item is not available in the Installer Menu when item 119 DATA CHANNEL is set to 0, except when item 002 AC ON is set to 2 or 3 for Instant ON.

Note: The TV clock must be set in order for a Wake For Update event to occur at the precise time of day in accordance with item 121 and item 122 settings.

122 - UPDATE TIME MN

Set the Wake For Update minute from 0 to 59. See also description for item 121 UPDATE TIME HR above.

Note: This item is not available in the Installer Menu unless item 121 UPDATE TIME HR is set from 0 to 23.

Note: The TV clock must be set in order for a Wake For Update event to occur at the precise time of day in accordance with item 121 and item 122 settings.

---

* PCS150R and later Pro:Centric servers do not support HRC or IRC cable channel frequencies.

Custom Master TV Setup

This section describes how to create a customized Master TV Setup for cloning purposes when the TV is in Pass-through Mode. All cloning (export and import) processes on the TV are performed via USB memory device / ".tlx" file. The Master TV Setup may be exported to a Clone (.tlx) file, which can then be used (i.e., imported) to configure either TVs that are to remain in Pass-through Mode or TVs that are to be configured for FTG Mode via CPU.

Cloning requirements and procedures are described in detail on pages 35 to 38.

Note: You can also use the FTG File Manager to create an FTG Configuration (.tlx) file for FTG Mode via CPU configuration, if desired (see pages 39 to 40). However, it is not possible to customize TV setup menu settings in the FTG File Manager. If you wish to include customized TV setup menu settings in the TV configuration, in addition to the channel lineup and Installer Menu settings, perform the Master TV Setup procedure to create a Clone (.tlx) configuration file.

Before You Begin

- It is recommended that you disconnect all Aux inputs if you intend to run Auto Tuning (Channel Search). Under certain conditions, Auto Tuning is disabled if there is an Aux input active.

- A Clone (.tlx) file comprises Installer Menu settings, IP Environment Menu settings (with the exception of Network Connection settings), and all TV sources' (analog, digital, AV1, HDMI, etc.) clonable setup menu settings. See also "Clonable TV Setup Menu Features" list below.

- If the ".tlx" file (either a Clone or FTG Configuration file) to be imported on the Target TV(s) contains an FTG Channel Map, the Target TV(s) will be configured for FTG Mode via CPU, though as part of the import process, you will have the option to select either logical or physical channel tuning. If you would like the Target TV(s) to remain in Pass-through Mode, the ".tlx" file should not include an FTG Channel Map.

Clonable TV Setup Menu Features

Channel
    Auto Tuning (Channel Lineup)
    Manual Tuning
    Channel Edit
    Channel Label

Picture
    Picture Mode

Audio
    Sound Mode
    Sound Effect
    Auto Volume
    Sound Out
    AV Sync Adjust
    Sound Optimizer

Time
    Clock
    − Clock Mode (Auto/Manual)
    − Time Zone
    − Daylight Saving
    Auto Off

Option
    Language
    Caption
    Standby Light

Note: Some menu options vary between analog and digital channels and Aux inputs.

Custom Master TV Setup Procedure

1. **Turn ON the TV.**

   The next step depends on whether the EZ-Manager Wizard appears on the screen when you turn ON the TV:

   - If the wizard is displayed, the TV is in the required factory default state. Exit the wizard, and then continue with step 2.

   - If the wizard is not displayed, restore the TV to a factory default condition before continuing with this procedure. See Reference section, "Restoring Factory Defaults on the TV(s)," as necessary, for further information.

2. **Set Installer Menu items.**

   This step provides specific instruction only on the Installer Menu items that should be set on a Master TV. Refer to pages 22 to 31 for detailed information on all Installer Menu items.
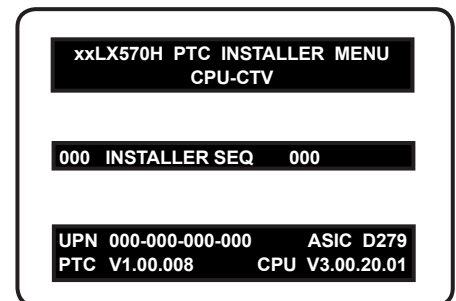
   a) Use the Installer Remote to access the PTC Installer Menu (see "Accessing the Installer Menu" on page 22 for further information).

   b) Set Installer Menu item **003 BAND/AFC**, as appropriate.

   - Broadcast: Set to 0.
   - CATV: Set to 1 (default).
   - HRC: Set to 2.
   - IRC: Set to 3.

   c) Set any other Installer Menu items that affect your TV programming network to the required configuration. For example, enable/disable Aux inputs, set a Start Channel, etc.

   d) After you have adjusted all Installer Menu item settings as required, and if you do not need to configure any IP Environment settings (see note below), press **OK** once on the Installer Remote to save your changes; then, press **OK** again to exit the menu.

      Note: If you intend to configure settings in the IP Environment Menu, which is accessible from the Installer Menu, you can proceed directly to step 3. All Installer Menu settings will be saved automatically when you access the IP Environment Menu.

3. **Configure IP Environment settings.**

   Note: You cannot return directly to the Installer Menu from the IP Environment Menu; thus, you may wish to set all Installer Menu items as needed before you access the IP Environment Menu. Otherwise, you will need to reaccess the Installer Menu to set additional items.

   Navigate to Installer Menu item 119 DATA CHANNEL, and press **2**-**5**-**3** + **MENU SETTINGS** to launch the IP Environment Menu. Then, complete network configuration as required. See "IP Environment Setup" on pages 45 to 48 for further information.

xxLX570H PTC INSTALLER MENU **CPU-CTV**	
000 INSTALLER SEQ 000	
UPN 000-000-000-000 ASIC D279 **PTC V1.00.008 CPU V3.00.20.01**	

Typical Installer Menu

003   BAND/AFC   001

Adjust the value for this
Installer Menu item, as required.

Custom Master TV Setup (Cont.)

(Continued from previous page)

4. Set up TV features.

On-screen setup menus control the features of the TV. Press **MENU SETTINGS** on the Installer Remote to access the TV setup menus, and then set Channel, Picture, Audio, Time, etc. options to the desired configurations. See "Clonable TV Setup Menu Features" list on page 32 and also notes below.

Note: If you intend to use the TV Zoning feature, make sure to assign the appropriate TV Zone # at this time as described in Reference section, "Using the TV Zoning Feature."

Note: If desired and if appropriate, you can run Auto Tuning (see step 5) prior to completing this step.

5. (Optional) Run Auto Tuning.

If you are creating a Master TV Setup for cloning purposes and you want the Target TV(s) to remain in Pass-through Mode, do NOT run Auto Tuning. If you export a Master TV Setup that includes an auto-tuned/edited channel lineup, thereby creating a Clone (.tlx) file with an FTG Channel Map, and then import the Clone file on a Target TV, this will put the Target TV in FTG Mode via CPU.

Note: When you import a Clone/Configuration (.tlx) file that contains an FTG Channel Map on a Target TV (for FTG Mode via CPU configuration), you will have the option to select either logical or physical channel tuning. For either selection, the channel sequence will be based on the order in which the channels appear in FTG Channel Map. You can view and/or edit the channel sequence in the FTG File Manager, as required.

a) Use the Installer Remote to access the Channel Menu. Then, select **Auto Tuning** and follow the on-screen instructions to search for all available analog and digital channels.

b) Use the **Channel Edit** option in the Channel Menu to edit the channel lineup, as necessary. Add/delete channels per your system requirements.

6. Verify the TV setup.

Make sure the TV features are set per your requirements. Also, if applicable, verify that the channel lineup is correct.

The Master TV Setup is now ready to be saved (exported) to a USB memory device. See "Cloning Procedures" on pages 35 to 38.
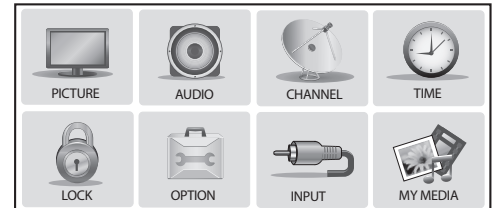
Use the TV setup menus to set the TV features to the desired configuration for the end user.
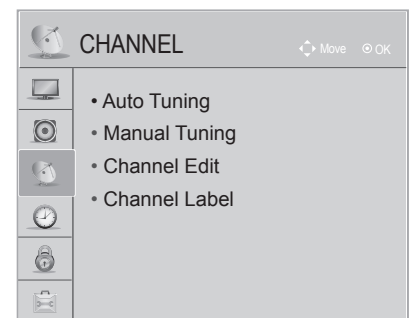
(Optional) Use Channel Menu options to run Auto Tuning and edit the channel lineup.

Cloning typically refers to the process of using a Master TV Setup to configure a Target TV. This section describes how to save (export) a Master TV Setup and then transfer (import) it to a Target TV using a USB memory device / Clone (.tlx) file.

You can also create an FTG Configuration (.tlx) file using the FTG File Manager and then use the Import Clone File procedure to transfer the configuration to Target TVs. Refer to "Creating an FTG Configuration File" on pages 39 to 40, as necessary.

Exporting a Clone File

This section describes how to export Master TV Setup configuration to a USB memory device / Clone (.tlx) file.
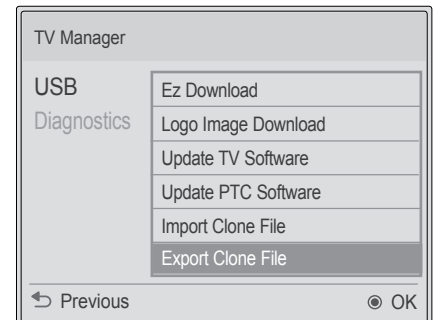
Before You Begin

• Ensure the USB device has been formatted with FAT format.

• If the TV is NOT already in FTG Mode via CPU, complete the Custom Master TV Setup procedure (see pages 32 to 34).

• If you would like the Target TV(s) to remain in Pass-through Mode after the Clone file is imported, ensure the Master TV does not have an auto-tuned/ edited channel lineup; otherwise, importing the exported file will result in the Target TV(s) being configured for FTG Mode via CPU.

• If you intend to use the TV Zoning feature, make sure to assign the appropriate TV Zone # as described in Reference section, "Using the TV Zoning Feature," BEFORE performing the procedure below.

• It is not possible to clone a Master TV's clock. Either set a Target TV's clock manually, or use the Auto Clock setting in the TV setup menus.

• Since the Export Clone File process retrieves the channel lineup from the CPU, if the TV is currently in FTG Mode via EBL (FTG Channel Map resides in EBL) it is not possible to export an FTG Channel Map.

⚠ **Caution: Do not unplug the TV power cord or remove the USB memory device while exporting is in progress, as doing so may cause the TV to malfunction or harm the USB device, respectively.**

Export Clone File Procedure

1. Ensure the Master TV is set up completely and turned ON.

2. Insert the USB memory device into the USB port on the Master TV.

3. Press **MENU SETTINGS** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is already in FTG Mode).

4. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number "**7**" key a total of seven times to display the TV Manager / USB Download Menu.

5. To gain access to the "Export Clone File" option in the TV Manager / USB Download Menu, key in the following number sequence on the Installer Remote: **9**-**8**-**7**-**6**.

TV Manager	
USB	Ez Download
Diagnostics	Logo Image Download
	Update TV Software
	Update PTC Software
	Import Clone File
	Export Clone File
↺ Previous	◉ OK

Note: TV Manager / Diagnostics is for service use only.

Export Clone File
Select the file name and press OK to start
▲
xxLX570H-UA00001.TLX
▼
↺ Previous   ◉ OK

Export Clone File... 25 %
Do not remove the USB from the port! Do not unplug!
xxLX570H-UA00001.tlx
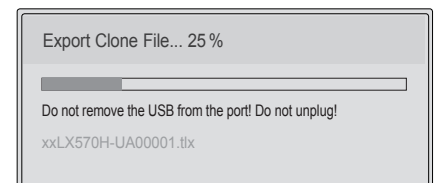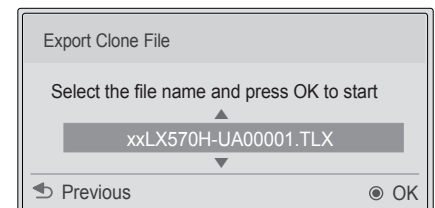
Cloning Procedures (Cont.)

(Continued from previous page)

6. Use the Up/Down arrow keys to select **Export Clone File**, and then press **OK**.

7. In the Export Clone File window, to differentiate this Clone file from other LX570H Clone files, you can use the Up/Down arrow keys to change the last five digits of the filename. Press **OK** when you are ready to continue.

   Export progress will be shown in a new window. Do NOT remove the USB device while exporting is in progress. When the export process is complete, the TV Manager / USB Download menu will reappear on the screen.

8. Press ↰ on the Installer Remote to exit the TV Manager / USB Download Menu, and remove the USB memory device from the Master TV.

   ⚠️ **Note: If the Master TV has a channel lineup, during the export process, logical channel numbers are automatically assigned in ascending order, starting with 0 (zero), to the physical RF channels of the TV channel lineup to create an FTG Channel Map. See also note below.**

   ⚠️ **Note: If the exported Clone file is to be used for FTG Mode via CPU configuration (i.e., it contains an FTG Channel Map), it is highly recommended that you open the file in the FTG File Manager—BEFORE transferring (importing) the file to any Target TVs—to verify FTG Channel Map and FTG Installer Menu settings. This will also enable you to confirm channels and add channel attributes, labels, etc.**

Importing a Clone File

This section describes how to transfer (import) a Clone or FTG Configuration (.tlx) file from a USB memory device to a TV using the TV Manager / USB Download Menu "Import Clone File" option. The ".tlx" file may be created either from a Master TV Setup that was saved (exported) from a Master TV or in the FTG File Manager.

Before You Begin

* Ensure the USB device has been formatted with FAT format.

* Avoid using special characters, such as ?, &, @, etc., in the Clone/Configuration (.tlx) filename.

* If the EZ-Manager Wizard appears on the screen when you turn ON the Target TV, you can use the wizard's "USB Configuration" option to access the TV Manager / USB Download Menu and complete the import procedure (see "TV Configuration Options" and/or "USB Configuration" on pages 13 and 18, respectively, as necessary).

* You may also use the Ez Download utility to import the Clone/Configuration (.tlx) file. See "Ez Download Utility" on pages 19 to 21 for further information.

* If the Target TV is currently in Pass-through Mode and you intend to use the TV Zoning feature— i.e., the Clone/Configuration (.tlx) file you are importing contains an FTG Channel Map and/or FTG profile(s) with TV Zone assignments—make sure to assign the appropriate TV Zone # in the TV when directed to do so in the procedure below. See Reference section, "Using the TV Zoning Feature," for further information.

* If you would like the Target TV(s) to remain in Pass-through Mode after the Clone/Configuration (.tlx) file is imported, ensure the ".tlx" file does not contain an FTG Channel Map; otherwise, the import procedure will result in the Target TV(s) being configured for FTG Mode via CPU.

(Continued from previous page)

• If a Clone (.tlx) file (exported Master TV Setup) contains an FTG Channel Map, the physical RF channels in the FTG Channel Map have been assigned logical channel numbers (see "Exporting a Clone File" above). When you import the Clone file with the FTG Channel Map on the Target TV(s), you will have the option to select either logical or physical channel tuning. Even if you select physical channel tuning, the (list of) physical RF channels in the FTG Channel Map will remain in logical order.

• If an FTG Configuration (.tlx) file (created in the FTG File Manager) contains an FTG Channel Map, each logical channel number in the FTG Channel Map has been assigned a physical RF channel or an Aux input (the latter designated by 130-0 through 137-0—see also Reference section, "TV Aux Input Configuration").

Note: When you import the FTG Configuration file on the Target TV(s), you will have the option to select either logical or physical channel tuning. If you select physical channel tuning, the physical RF channels and Aux inputs in the FTG Channel Map will remain in logical order.

• If the Target TV EBL is already in FTG Mode, you cannot use this procedure to make changes to the FTG Channel Map and FTG Installer Menu settings. You must use a direct PC-to-TV connection as described in Reference section, "FTG Mode via EBL (Local Configuration)," or an FMA head end device to reconfigure the EBL.

• If the preceding condition applies, but you wish to switch the TV to FTG Mode via CPU, see Reference section, "Restoring Factory Defaults on the TV(s)," for further information before proceeding.

• If the Clone/Configuration (.tlx) file was edited/created in the FTG File Manager, it may contain multiple zoned FTG Installer Menu profiles for different TV models. Make sure it includes the appropriate Installer Menu profile(s) for the Target TV(s) before performing the procedure below.

⚠ **Caution: Do not unplug the TV power cord or remove the USB memory device while importing is in progress, as doing so may cause the TV to malfunction or harm the USB device, respectively.**

Import Clone File Procedure

1. Turn ON the Target TV.

2. The next step depends on whether the EZ-Manager Wizard appears on the screen when you turn ON the TV:

   • If the wizard is displayed, you can complete the import procedure via the wizard, as indicated above (see "Before You Begin"). However, to continue with this procedure and access the "Import Clone File" option from the TV menus, exit the EZ-Manager Wizard. Then, continue with step 3.

   • If the wizard is not displayed, go directly to step 3.

3. If applicable (see also "Before You Begin" above), make sure to assign the appropriate Zone designation in the Target TV at this time.

   ⚠ **Note: In order for the proper location-specific TV Zone profile data to be applied, the Zone designation must be assigned in the Target TV(s) BEFORE importing is initiated.**

4. Insert the USB memory device with the Clone/Configuration (.tlx) file into the USB port on the Target TV.

Cloning Procedures (Cont.)

(Continued from previous page)

5. Press **MENU SETTINGS** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is already in FTG Mode).

6. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number "**7**" key a total of seven times to display the TV Manager / USB Download Menu.

7. With the TV Manager / USB Download Menu on display, use the Up/Down arrow keys to select **Import Clone File**, and then press **OK**.

8. In the Import Clone File window, use the Up/Down arrow keys to select the ".tlx" file you want to import.

   Note: Filenames of exported Clone files are comprised of the TV model and a five-digit number, for example, xxLX570H-UA00001.TLX.

9. If the Clone/Configuration (.tlx) file includes an FTG Channel Map, select the desired Channel Tuning / Channel Banner Display option at the right side of the Import Clone File window:

   • Press the green ⬚ button on the Installer Remote to select **Logical** tuning, or

   • Press the yellow ⬚ button on the Installer Remote to select **Physical** tuning.

   A checkmark will appear at the left of the selected option. Logical tuning is selected by default.

   Note: If the ".tlx" file does not include an FTG Channel Map, the message, "No Channel Map in TLX file," will be displayed at the right of the screen.

10. Press **OK** on the Installer Remote when you are ready to continue.

   Import progress will be shown in a new window. Do NOT remove the USB device while importing is in progress. When the import process is complete, an "Updating Complete" window is briefly displayed, and then the TV exits the TV Manager / USB Download Menu.

11. Remove the USB memory device from the Target TV, and verify that the appropriate configuration is now resident on the Target TV.

Note: If the Target TV was previously in Pass-through Mode and the Clone/Configuration (.tlx) file that was imported contained an FTG Channel Map, the Target TV is now in FTG Mode via CPU. After the import process is complete, the TV tunes according to the Start Channel setting in the Installer Menu. If a Start Channel is specified, the TV will tune to that channel, though, in the case of FTG Mode via CPU configuration, a channel banner will only be displayed if the Start Channel is included in the FTG Channel Map (depending on your selection in step 9, the channel banner will display either the Start Channel's logical channel number or physical RF channel number). Otherwise, the TV will either return to the last channel tuned (TV in Pass-through Mode) or tune to the first channel in the FTG Channel Map (TV in FTG Mode via CPU). If the latter, remember that the channels in the FTG Channel Map are always arranged in logical order, regardless of your selection in step 9.

TV Manager	
USB	Ez Download
Diagnostics	Logo Image Download
	Update TV Software
	Update PTC Software
	Import Clone File
↩ Previous	◉ OK

Note: TV Manager / Diagnostics is for service use only.

Import Clone File	
xxLX570H-UA00001.TLX	Channel Tuning / Channel Banner Display
	☑ Logical
	☐ Physical
↩ Previous	◉ OK

Updating Clone File... 50 %

Do not remove the USB from the port! Do not unplug!

xxLX570H-UA00001.tlx
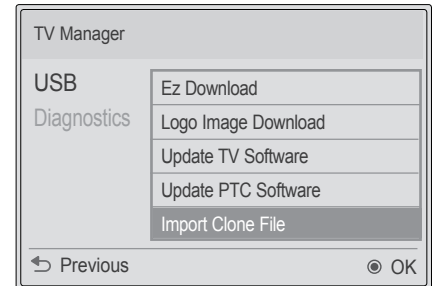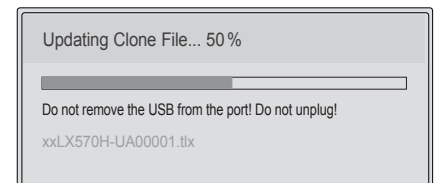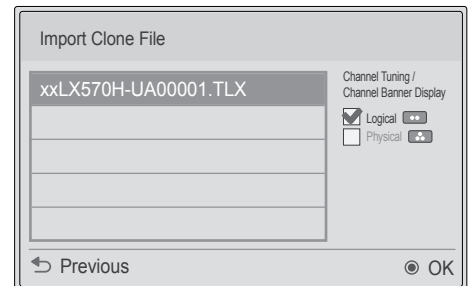
As indicated in the introduction to this document, there are two separate and distinct methods for configuring LX570H TVs for FTG Mode of operation: one method is to configure the TV CPU for FTG Mode operation, while the other is to configure the TV EBL for FTG Mode operation. FROM A LOCAL CONFIGURATION STANDPOINT, EACH OF THESE METHODS IS MUTUALLY EXCLUSIVE. IF THE CPU IS IN FTG MODE, THE EBL CANNOT BE SWITCHED TO FTG MODE. LIKEWISE, IF THE EBL IS IN FTG MODE, THE CPU CANNOT BE SWITCHED TO FTG MODE.

This section provides an overview of the FTG File Manager, which is used for FTG Mode via CPU configuration. FTG File Manager software is available online at: www.LGsolutions.com/ftgsoftware.

Creating an FTG Configuration File

The procedure below describes how to use the FTG File Manager utilities (see sample screens on pages 41 to 44) to create an FTG Configuration (.tlx) file that can be saved to a USB memory device. In order to enable decryption of Pro:Idiom encrypted channels, it is recommended that you create or view/edit an FTG Configuration file using the FTG File Manager.

Note: There is also an option to save (export) FTG Configuration from a TV, which may be desirable or required if you want to save customized TV setup menu settings to the FTG Configuration file and/or if you do not know the RF channels at the site. See "Exporting a Clone File" on pages 35 to 36 for further information.

This procedure provides an overview of the steps required to create an FTG Configuration (.tlx) file. Refer to the *Free-To-Guest (FTG) File Manager User Guide* for further information.

1. Install (if necessary) and launch the FTG File Manager (v1.2.4 or later) on the PC that will be used to create the FTG Configuration (.tlx) file.

2. You have a number of options:

   • To view and/or base a new FTG Configuration file on an existing FTG Configuration (.tlx) file, click the **Open** button in the TLX File command section of the FTG File Manager main screen, and select/double-click on the desired ".tlx" file.

     A list of the file's contents will be displayed in the TLX File Contents window. Either double-click on an individual item to copy it, or click the **Copy All** button directly above the TLX File Contents window to automatically copy all the contents of the opened file to the FTG Configuration List and, if applicable, TV Setup Menu List. Note, though, that while TV setup menu settings can be included in the new FTG Configuration file, the TV setup menu settings are not available for editing.

     Edit the configuration of the items in the FTG Configuration List as well as the FTG Configuration List itself and/or the TV Setup Menu List, as necessary, to create a new file. Then, proceed to step 3 when you are ready to continue.

   • To open an existing FTG Configuration (.rml) file created in the FTG Device Configuration Application to use its FTG Channel Map and/or FTG Installer Menu settings, click **File** and then **Open** from the FTG File Manager menu bar, and select/double-click on the desired ".rml" file.

     Edit channels and/or settings as necessary. Then, proceed to step 3 when you are ready to continue.

   • Create a new FTG Channel Map using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility. Up to 600 channels can be defined in the FTG Channel Map.

     When you are ready to continue, click **Configure** and then **FTG File Manager** from the FTG File Manager menu bar to return to the FTG File Manager main screen, and then proceed to step 3.

FTG File Manager Utilities Overview (Cont.)

> **Note:** To remove an individual item from the FTG Configuration List or the TV Setup Menu List, click on/ highlight the item to be removed, and then click the **Remove Item** button directly above the applicable "List" window. To clear both the current FTG Configuration List and TV Setup Menu List contents, click the **Clear** button in the List command section of the FTG File Manager main screen.

> **Note:** To clear the current TLX File Contents, click the **New** button in the TLX File command section of the FTG File Manager main screen (above the TLX File Contents window).

3. To add an FTG Channel Map to the FTG Configuration List, click ⟩⟩ under FTG Channel Map. This will copy the current mapped channels to the FTG Configuration List.

> **Note:** If you make any change(s) in the FTG Channel Map Configuration Utility to the current data to be included in the FTG Configuration List, you will need to recopy the FTG Channel Map to the FTG Configuration List.

4. (Optional) Load default FTG Installer Menu settings for the TV:
   • Click the down arrow at the right of the Chassis field in the Installer Menu Templates section of the FTG File Manager main screen, and select the appropriate chassis (depending on the TV type) from the drop-down list of available models.
   • Click the **Load** button.
   • Use the FTG Installer Menu Configuration Utility to modify settings, if necessary. Then, return to the FTG File Manager main screen.

5. If you wish to change the Zone assignment for the current FTG Installer Menu settings, click on the down arrow at the right of the Zone field (below the FTG Installer Menu Settings field), and select the appropriate Zone (0–8).

> **Note:** See Reference section, "Using the TV Zoning Feature," for further information on the TV Zoning feature and setting the TV Zone # in the TV(s).

6. To add FTG Installer Menu settings to the FTG Configuration List, click ⟩⟩ under FTG Installer Menu Settings. This will copy the selected model settings to the FTG Configuration List.

> **Note:** If you make any change(s) in the FTG Installer Menu Configuration Utility to the current data to be included in the FTG Configuration List, you will need to recopy the FTG Installer Menu settings to the FTG Configuration List.

> **Note:** At the top of both the FTG Configuration List and TV Setup Menu List windows, an Edit Zone field enables you to change the Zone assignment for each LX570H Installer Menu and/or TV Setup Menu profile, if desired. Select/highlight the desired profile, and then click on the down arrow at the right of the applicable Edit Zone field to select the appropriate Zone.

7. Click the **Save** button in the List command section of the FTG File Manager main screen to save the FTG Configuration List and, if present, TV Setup Menu List contents to an FTG Configuration (.tlx) file on the PC's hard drive for later use.

   In the Save As pop-up window, name the file (avoid using special characters, such as ?, &, @, etc.) and click **Save**. The default folder path is C:\Program Files\Zenith\FTG\TLX. Note that the FTG Configuration file will have a ".tlx" file extension.

> **Note:** To remove an individual item from the FTG Configuration List or the TV Setup Menu List before saving the new file, click on/highlight the item to be removed, and then click the **Remove Item** button directly above the applicable window. To clear both the current FTG Configuration List and TV Setup Menu List contents, click the **Clear** button in the List command section of the FTG File Manager main screen.

8. Transfer the FTG Configuration (.tlx) file to a USB memory device, and proceed to "Importing a Clone File" on pages 36 to 38 to transfer the FTG Configuration file to an LX570H TV.

FTG File Manager Main Screen

The FTG File Manager main screen enables you to compile, modify, and save FTG Configuration (.tlx) files. It also allows you to change the Zone assignment for each Installer Menu profile, if desired (see Reference section, "Using the TV Zoning Feature," for further information).

FTG CONFIGURATION LIST
Data to be saved in FTG Configuration (.tlx) file.

CLEAR/SAVE
FTG Configuration and TV Setup Menu List options.

NEW/OPEN
TLX File options.

Filename of opened FTG Configuration (.rml) file created using FTG Device Configuration Application.

Copy FTG Channel Map to and from FTG Configuration List.

Copy FTG Installer Menu settings to and from FTG Configuration List. Assign Zone as applicable.

Load default FTG Installer Menu for appropriate LX570H chassis.

TV SETUP MENU LIST
Data to be saved in FTG Configuration file.

TLX FILE CONTENTS
Data contained in opened FTG Configuration (.tlx) file.

Note: The data referenced in the FTG Configuration List is only a snapshot of the current FTG Channel Map and FTG Installer Menu settings when copied to the list. If you make any change(s) to the current data to be included in the FTG Configuration List, you will need to recopy Channel Map and Installer Menu settings to the FTG Configuration List.

FTG File Manager Utilities Overview (Cont.)

FTG Channel Map Configuration Utility

The FTG Channel Map Configuration Utility enables you to create, view, edit, and print a Logical Channel Map.

EDIT/ADD MAP
Click to open the FTG Channel Map Editor to create or edit an FTG Channel Map (see next page).

PRINT MAP
Click to display a printable FTG Channel Map Report. The report can also be exported as an HTML or Text file.

Filename of opened FTG Configuration (.rml) file created using FTG Device Configuration Application.

FTG Channel Map Editor

The FTG Channel Map Editor shows a single Logical Channel's data and the FTG Channel Map.

LOGICAL CHANNEL MAPPING
Select a Logical Channel number. Then, assign the RF, Major, and Minor channel numbers to complete the mapping.

CUSTOM CHANNEL LABELS/ICONS
Enter custom labels and select icons by name on menu or by number.

SET CHANNEL ATTRIBUTES
Check/select Encrypted, OSD, or Blank Video.

ZONE RESTRICTION
Select Zone restriction for channel. See Reference section, "Using the TV Zoning Feature," for further information.

ADD
After defining a new Logical Channel, click to add channel to the FTG Channel Map.

EXIT
Click to exit editor and return to FTG Channel Map Configuration Utility.

UPDATE
After editing an existing Logical Channel's data, click to commit the changes in the FTG Channel Map.

DELETE
Click to remove highlighted channel from FTG Channel Map.

FTG Installer Menu Configuration Utility

CONFIGURATION SETTINGS
Select tabs for categories of Installer
Menu items to set up TV.
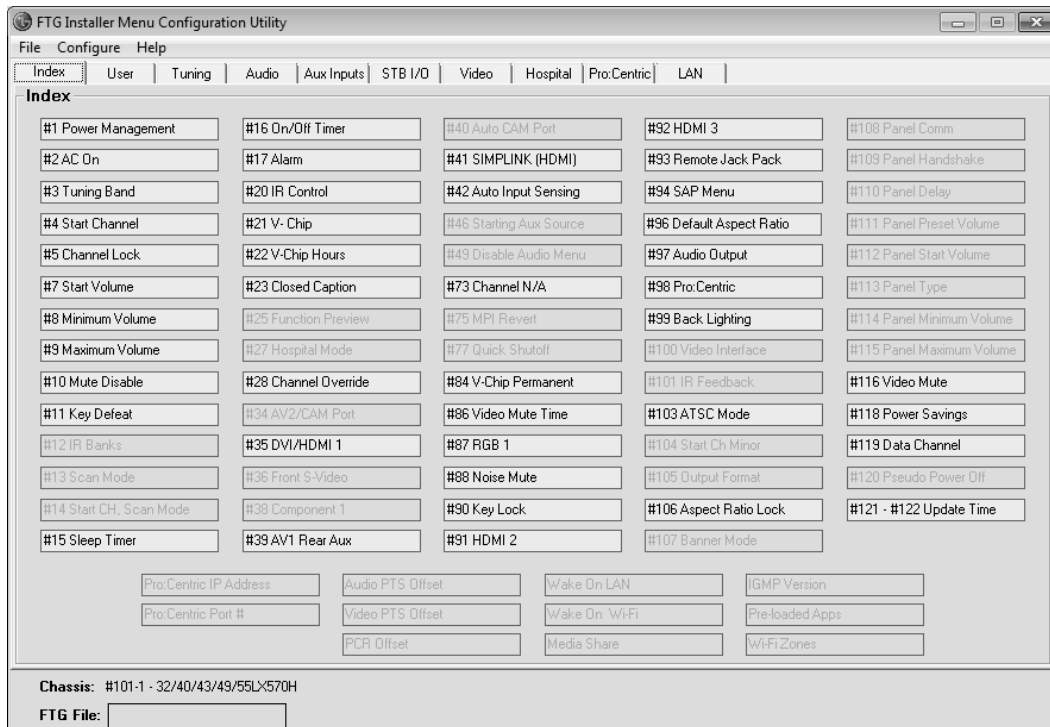
Filename of opened FTG Configuration
(.rml) file created using FTG Device
Configuration Application.

Notes:

- The Pro:Centric tab enables you to set up Pro:Centric-specific parameters. Refer to the ***Free-To-Guest (FTG) File Manager User Guide*** for further information.

- LAN and Hospital parameters are not applicable for these TV models.

The IP Environment Menu enables you to set up the network features of the TV. With the exception of Network Connection settings, the IP Environment settings are editable (with the Installer Remote) only if the TV is in Pass-through Mode and read-only when the TV is not in Pass-through Mode. Also, if you intend to create a Master TV Setup for cloning purposes (see Master TV Setup procedure on pages 32 to 34), all IP Environment settings, with the exception of the Network Connection settings, may be cloned.

Accessing the IP Environment Menu

1. Use the Installer Remote to access the Installer Menu (see "Accessing the Installer Menu" on page 22 for further information).

2. Navigate to Installer Menu item 119 DATA CHANNEL, and press **2**-**5**-**3** + **MENU SETTINGS** to launch the IP Environment Menu (see example at right).

Use the Up/Down arrow keys on the Installer Remote to select the desired menu option and then press **OK**. Refer to the following sections for information on each of the IP Environment setup options.

When you have completed your IP Environment configuration as required, press **EXIT** or ↰ on the Installer Remote to exit the IP Environment Menu.

Configuring the Network Connection

This option enables you to set up the TV's wired network connection.

1. With the IP Environment Menu on display, use the arrow keys on the Installer Remote to select **Network Connection**. Then, press **OK**.

   The first of a series of Network Setting windows will be displayed on the screen.

2. If not already done, connect the appropriate cable between the TV and the network. Then, use the arrow keys on the Installer Remote to select **Start Connection** and press **OK**.

3. By default, the TV is configured for DHCP. If configured, the DHCP server will assign an IP address to the TV once the TV successfully connects to the network, and a "Wired network is connected" message will be displayed at the top of the next Network Setting screen (see example at right).

   • If no further network configuration is required, use the arrow keys on the Installer Remote to select **Complete** and press **OK** to return to the IP Environment Menu.

   • If a DHCP server is not configured and/or if you wish to set static IP configuration data for the TV, continue with step 4.

4. Use the arrow keys on the Installer Remote to select **Set Expert** from the Network Setting screen, and then press **OK**.

IP Environment   ◆ Move   ◉ OK

• Network Connection
• Network Status
• Pro:Centric
• MAC Address: 3C:CD:93:E5:78:8F

Note: When you enter the IP Environment Menu, the Installer Menu is exited (all current settings are saved automatically upon exit). If you are also in the process of updating Installer Menu items, you may wish to set all items as needed before you access the IP Environment Menu. Otherwise, after exiting the IP Environment Menu, you will need to reaccess the Installer Menu to set additional items.

Network Setting

Connect a LAN cable to the back of TV.
Setting your network will enable network-related features on the TV.

Start Connection

↰ Previous   ◉ Next

Network Setting

ⓘ   Wired network is connected.

For detailed settings, select [Set Expert].

Set Expert   Complete
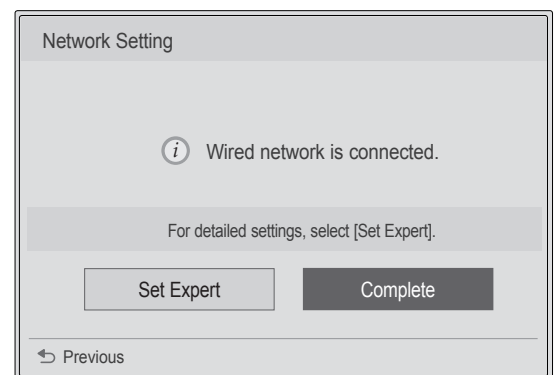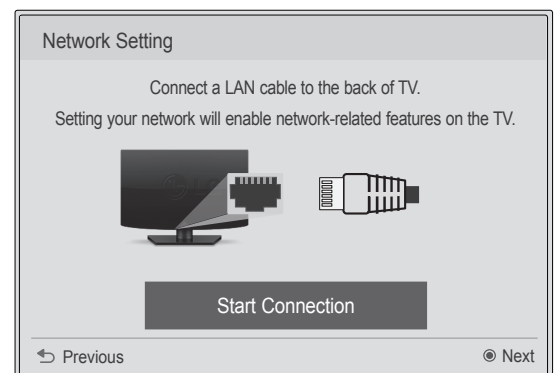
↰ Previous

IP Environment Setup (Cont.)

(Continued from previous page)

The next Network Setting window will enable you to specify the IP and DNS configuration for this TV. Auto settings will be selected by default. Use the arrow keys to select the appropriate options, and specify the configuration data for the IP and DNS modes. When all fields are completed, select **OK** on the screen and press **OK** on the Installer Remote.

Note: You can specify a static DNS server with an auto-configured IP address but not vice versa.

The TV will attempt to connect to the network and you will see a progress screen that indicates status as each network element is confirmed. When the network is connected successfully, a "Wired network is connected" message will be displayed at the right of the screen, along with the network configuration data (see example at right below).

5. Select **Complete** (if not already selected), and then press **OK** on the Installer Remote to return to the IP Environment Menu.

Note: If the network connection is not successful, the progress screen will identify the network element in which the connection failed. Check your cabling and/or, if necessary, press ↰ on the Installer Remote to verify the configuration data.

Network Status

This option enables you to check the status of the network connection.

1. With the IP Environment Menu on display, use the arrow keys on the Installer Remote to select **Network Status**. Then, press **OK**.

The TV will display a status screen as it confirms each of the network elements—TV, Gateway, DNS, and Internet (see example at right). If the network is connected successfully, a "Wired network is connected" message will be displayed at the right of the screen, along with the network configuration data.

Note: If a problem is detected, the status screen will identify the network element in which the connection failed. Check cabling and/or configuration data, as necessary. If the status screen is still on display, you can select **Test** and press **OK** to recheck the network status.

2. When the status screen shows that the network is connected, select **Complete** (if not already selected) and press **OK** on the Installer Remote to return to the IP Environment Menu.

Note: If you wish to cancel the status check while it is in progress, select "Close" or press ↰ to return to the IP Environment Menu.

Network Setting

Select the IP setting mode.

IP Mode	◄ IP Auto Setting ►
• IP Address	0 . 0 . 0 . 0
• Subnet Mask	255 . 255 . 0 . 0
• Gateway	0 . 0 . 0 . 0
DNS Mode	DNS Auto Setting
• DNS Server	0 . 0 . 0 . 0

OK

↰ Previous   ◉ Next

Network Status

TV

Gateway

DNS

Internet

Auto mode

Wired network is connected.

MAC Address	: 3C:CD:93:E5:78:8F
IP Address	: 10.2.3.4
Subnet Mask	: 255.255.255.0
Gateway	: 10.10.10.10
DNS Server	: 10.5.6.7

Setting	Test	Complete
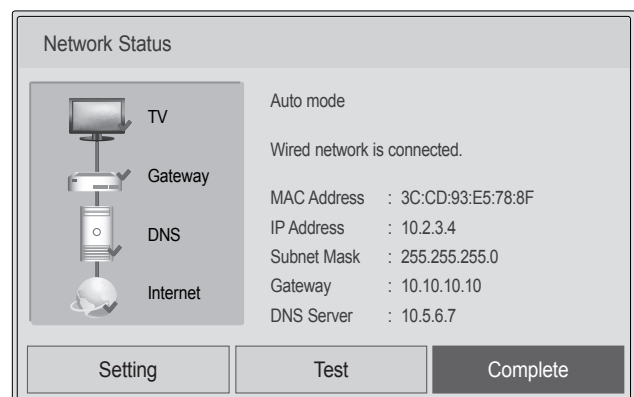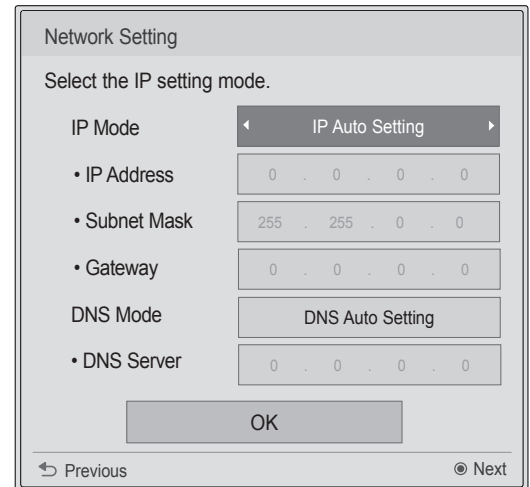
Pro:Centric Setup

Pro:Centric options enable you to configure the TV with the appropriate settings to connect to the Pro:Centric server. Use the Up/Down arrow keys on the Installer Remote to navigate between fields.

1. With the IP Environment Menu on display, use the arrow keys on the Installer Remote to select **Pro:Centric**. Then, press **OK**.
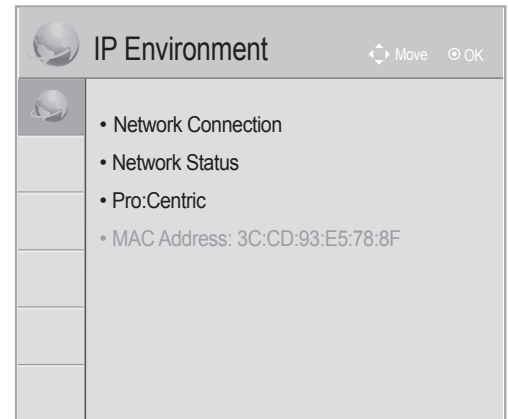
   Note: Options that are initially grayed out/inaccessible in the Pro:Centric Menu are dependent upon other settings in the display. For example, if "IP" is selected in the Media Type field, the Server IP and Port Number fields become accessible.

2. Refer to the appropriate subsection(s) below to configure the TV's Pro:Centric settings to match those of the Pro:Centric server.

   While the Pro:Centric application (Mode) itself is an additional feature, the appropriate Pro:Centric server configuration must be completed to enable TV E-Z Installation (splash screen, configuration, and software/firmware) data downloads and, if configured, the Pro:Centric application download.

   Note: For those fields that permit direct entry of numerical values (for example, Server IP, Port Number, Data Channel, etc.), once you key in the maximum number of digits allowed in the highlighted field, the next available field will be highlighted.
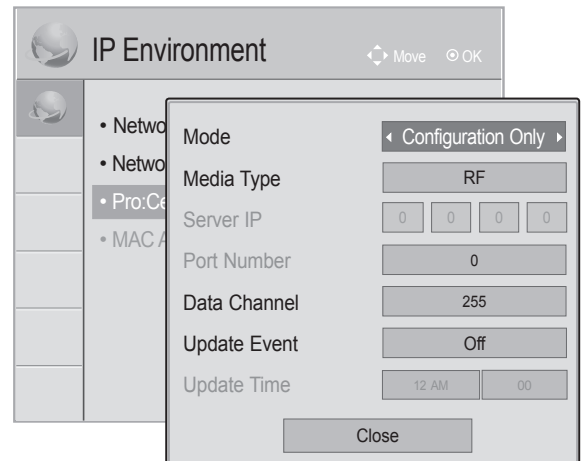
RF Configuration

a) In the Media Type field, use the Left/Right arrow keys to select **RF**.

   Note: If the Media Type has already been set in the EZ-Manager Wizard, the specified value will be reflected in this field.

b) In the Data Channel field, either key in or use the Left/Right arrow keys to select the RF channel number that will be used by the Pro:Centric server as its data channel. The Data Channel value can be set from 0 (disabled) to 135.*

   For TVs in Pass-through Mode or FTG Mode via CPU, if this item is left at its default value (255), the TV's Data Channel Auto Search feature will be enabled. See Installer Menu item 119 DATA CHANNEL description on page 31 for further information.

   Note: If the Data Channel has already been set in the Installer Menu (Installer Menu item 119) or in the EZ-Manager Wizard, the specified channel will appear in this field. If you change the Data Channel in this menu, Installer Menu item 119 will now show the value you entered here.

---

* PCS150R and later Pro:Centric servers do not support HRC or IRC cable channel frequencies.

IP Environment Setup (Cont.)

(Continued from previous page)

IP Configuration

a) In the Media Type field, use the Left/Right arrow keys to select **IP**.

   Note: If the Media Type has already been set in the EZ-Manager Wizard, the specified value will be reflected in this field.

   Note: Setting the Media Type to "IP" automatically sets the Data Channel field to "253." You cannot alter this setting (unless you revert Media Type to "RF"). Also, it is not possible to direct enter "253" in the Data Channel field.

b) In the Server IP and Port Number fields, either key in or use the Left/Right arrow keys to select the appropriate values for the Pro:Centric server IP address and port number. The IP address must match the IPv4 multicast address and the port number must match the port number that is set in the Pro:Centric server.

   Note: If the server IP address and port number have already been set in the EZ-Manager Wizard, the specified data will be reflected in these fields.

Pro:Centric Application Mode Configuration

In the Mode field, use the Left/Right arrow keys to select the appropriate Pro:Centric Application Mode setting—**Configuration Only**, **FLASH**, or **GEM**. If the Pro:Centric Mode is set to "Configuration Only," Pro:Centric application data will not be downloaded.

Note: If the mode has already been set in the Installer Menu (item 098 PRO:CENTRIC) or in the EZ-Manager Wizard, the specified mode will be reflected in this field. If you change the mode in this menu, Installer Menu item 098 will now reflect the value you selected here.

3. In the Update Event field, use the Left/Right arrow keys to select **On** or **Off**, as required. Based on the Update Time settings, the Wake For Update feature wakes the TV once daily to check for, and if applicable, download updates from the Pro:Centric server. See Installer Menu item 121 UPDATE TIME HR description on page 31 for additional information on Wake For Update functionality. If you set Update Event to "On," specify the appropriate Wake For Update time in the Update Time fields, as desired. Note that the Update Time set in this menu is based on a 12-hour clock. Ensure the AM/PM specification is set accordingly.

4. Once all fields are completed as required, either select **Close** and then press **OK** on the Installer Remote or press ⏎ to return to the IP Environment Menu.

Remote Jack Pack Setup

RJP Available? If you will use a Remote Jack Pack (RJP) in your system, set Installer Menu item **093 RJP AVAILABLE** appropriately (for example, on a legacy model RJP: HDMI Mode, set RJP AVAILABLE to 1). See Installer Menu detailed descriptions for further information.

```
093   RJP AVAILABLE        001
```

TV Connections

⚠ **Caution: Make these connections ONLY after Master TV Setup and TV cloning procedures are complete. Also, make sure to use the RJ-45 Control cable from the RJP cable bundle to make the connection to the TV's RJP port. Do NOT connect a standard Ethernet cable to the RJP port, as this may damage the TV and network equipment.**

Refer to the figure below, and connect the RJ-45 Control cable from the RJP cable bundle to the RJP port on the TV's rear jack panel. Then, connect HDMI, RGB, and Composite Video/Audio connectors, as applicable, for the cable bundle.

HDMI IN 1
Connect HDMI connector from RJP cable bundle.

RGB IN (PC)
Connect RGB connector from RJP cable bundle (legacy RJP only).

RJP
Connect RJ-45 Control cable from RJP cable bundle.

AUDIO/VIDEO IN
Connect Composite Video/Audio connectors from RJP cable bundle. (Composite Video on legacy RJP only.)
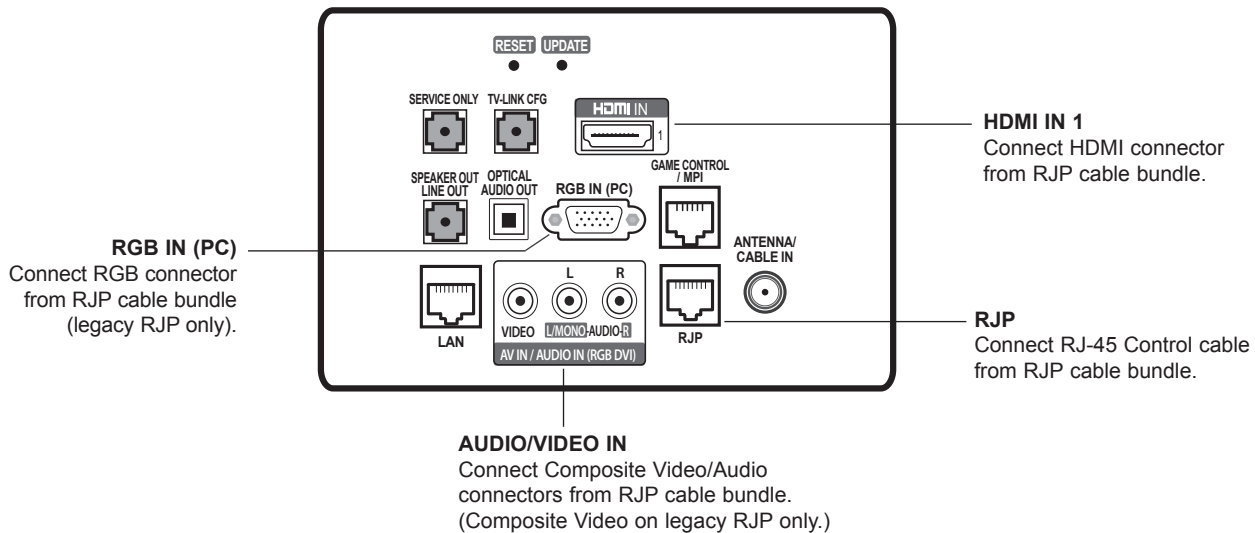
Reference: Updating TV/PTC Software using a USB Memory Device

This section describes how to update TV (CPU) and/or PTC software using the TV Manager / USB Download Menu "Update TV Software" and/or "Update PTC Software" option(s), respectively, though you may also use the Ez Download utility to update software, if desired. See "Ez Download Utility" on pages 19 to 21 for further information.

Before You Begin

• Software update files must be stored in a folder named "LG_DTV" in the root directory of the USB memory device.

• Ensure the USB device has been formatted with FAT format.

Update the TV/PTC Software

Note: You can check the TV/PTC software versions by accessing the Installer Menu with the Installer Remote. See "Accessing the Installer Menu" on page 22 for further information. PTC and CPU versions are displayed in the Installer Menu footer.

Note for TV CPU Software Update only: If the TV detects a later version of software on the USB device, it will automatically display a dialog from which you can start the software update immediately. Otherwise, you can close the dialog, and access the TV Manager / USB Download Menu as described below.

1. Turn ON the TV, and then insert the USB memory device into the TV's USB port.

2. Press **MENU SETTINGS** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is not in Pass-through Mode).

3. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number "**7**" key a total of seven times to display the TV Manager / USB Download Menu.

4. With the TV Manager / USB Download Menu on display, use the Up/Down arrow keys to select **Update TV Software** or **Update PTC Software**, as applicable, and then press **OK**.

5. In the next window (TV Software Update or Update PTC Software depending on your selection in step 4—see also screen samples at right), use the Up/Down arrow keys to select/highlight the update file to download. Then, press **OK**.

   Note: Do not select Forced Update options unless you have been specifically instructed to do so or have previous experience with Expert Software Updates.

The TV will show update progress in a new window. Do NOT remove the USB device until the software update is complete. When the software update is complete, the TV will briefly display a "Updating complete" window and then automatically reboot.

TV Manager	
USB	Ez Download
	Logo Image Download
	Update TV Software
	Update PTC Software
	Import Clone File
↺ Previous	◉ OK

ⓘ TV Software Update (Expert)

[Current TV Software Version Information]
EPK : 03.00.12

The following software files are found in the memory card.
Select the file you want to download to this TV
or press EXIT to cancel the update.

EPK: 03.00.20

[Forced Update Option]
☐ SPI Boot
☐ LOGO Image
xxLX570H_v3_00_USB

TV Manager	
USB	Ez Download
	Logo Image Download
	Update TV Software
	Update PTC Software
	Import Clone File
↺ Previous	◉ OK

Update PTC Software

xxLX570H_v1.00.008.txt

↺ Previous	◉ OK

Note: TV Manager / Diagnostics is for service use only.

Reference: Downloading a Splash Screen Image using a USB Memory Device

This section describes how to download a splash screen image using the TV Manager / USB Download Menu "Logo Image Download" option, though you may also use the Ez Download utility to download the splash screen image, if desired. See "Ez Download Utility" on pages 19 to 21 for further information.

Splash Screen Image File Guidelines

• The splash screen image must be a baseline (not progressive) JPEG.

• The image should be no larger than 1 MB.

• The maximum resolution allowed for a 32LX570H splash screen image is 1360 x 768 pixels (HD).

• The maximum resolution allowed for a 40/43/49/55/65LX570H splash screen image is 1920 x 1080 pixels (FHD).

• Avoid using special characters, such as ?, &, @, etc., in the splash screen image filename.

Before You Begin

• The splash screen image file must be stored in a folder named "LG_DTV" in the root directory of the USB memory device.

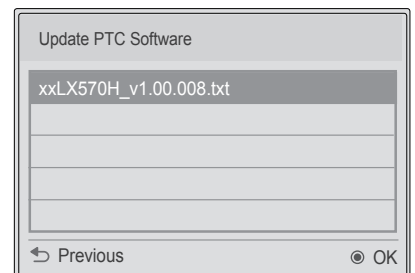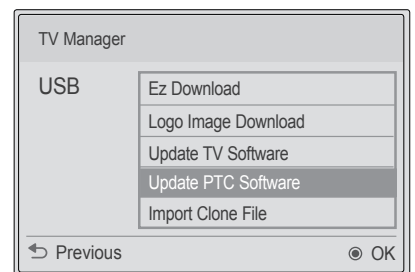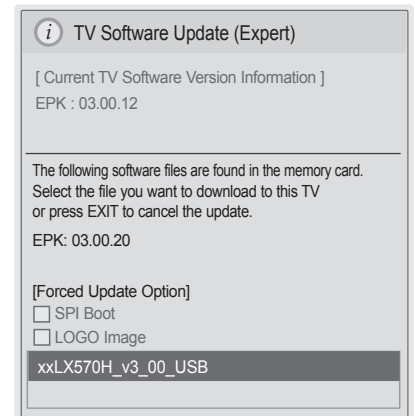• Ensure the USB device has been formatted with FAT format.

Download the Splash Screen Image

1. Turn ON the TV, and then insert the USB memory device into the TV's USB port.

2. Press **MENU SETTINGS** on the Installer Remote to display the TV setup menus (TV is in Pass-through Mode) or the Function Menu (TV is not in Pass-through Mode).

3. Use the arrow navigation keys to select/highlight either the **Option** menu icon from the TV setup menus or the **Lock** menu icon from the Function Menu. Then, press the number "**7**" key a total of seven times to display the TV Manager / USB Download Menu.

4. With the TV Manager / USB Download Menu on display, use the Up/Down arrow keys to select **Logo Image Download**, and then press **OK**.

5. In the Logo Image Download window, use the Up/Down arrow keys to select the image file to download, and then press **OK**.

The TV will show update progress in a new window. Do NOT remove the USB device until the splash screen image update is complete. When the image update is complete, the TV will briefly display a "Updating complete" window and then automatically reboot. During the reboot, you should see the new splash screen.

TV Manager

USB   Ez Download
         Logo Image Download
         Update TV Software
         Update PTC Software
         Import Clone File

↰ Previous   ◉ OK

Logo Image Download

Splash-Image-1920x1080-ProCentricJPEG

↰ Previous   ◉ OK
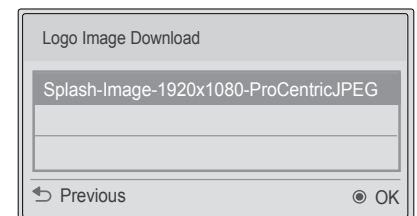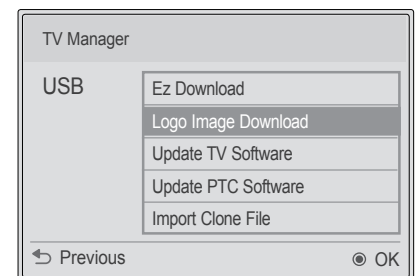
Note: TV Manager / Diagnostics is for service use only.

Reference: Power Consumption Settings

The following tables assume that Installer Menu item 118 POWER SAVINGS is set to 3 (default) and Installer Menu item 099 BACK LIGHTING is set as shown below (default value is 255).

Item 099 Back Lighting (Static)	32LX570H		40LX570H		43LX570H	
	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings
100	46.9	0%	60.6	0%	52.9	0%
90	44.0	6%	56.0	8%	49.6	6%
80	41.2	12%	51.9	14%	48.8	8%
70	38.3	18%	47.7	21%	46.9	11%
60	37.1	21%	45.9	24%	45.5	14%
50	36.1	23%	44.1	27%	43.3	18%
40	34.4	27%	41.4	32%	41.6	21%
30	32.6	31%	39.0	36%	35.3	33%
20	27.8	41%	31.8	47%	30.4	43%
10	22.9	51%	24.4	60%	24.3	54%
1	18.5	60%	17.9	71%	19.6	63%

Item 099 Back Lighting (Dynamic)	32LX570H		40LX570H		43LX570H	
	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings
200	47.3	0%	60.8	0%	52.9	0%
190	44.1	7%	56.3	7%	49.7	6%
180	41.3	13%	52.1	14%	48.8	8%
170	38.4	19%	47.9	21%	47.1	11%
160	37.3	21%	46.1	24%	45.7	14%
150	36.2	23%	44.4	27%	43.5	18%
140	34.4	27%	41.7	31%	42.0	21%
130	32.7	31%	39.4	35%	35.5	33%
120	27.8	41%	32.0	47%	30.6	42%
110	22.9	52%	24.5	60%	24.4	54%
101	18.5	61%	18.0	70%	19.7	63%

Note: Values are results of controlled experiments under laboratory conditions.

Item 099 Back Lighting (Static)	49LX570H		55LX570H		65LX570H	
	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings
100	53.2	0%	61.2	0%	85.3	0%
90	50.2	6%	57.2	7%	78.8	8%
80	49.2	8%	56.2	8%	75.0	12%
70	47.4	11%	53.9	12%	72.8	15%
60	46.2	13%	52.3	15%	69.9	18%
50	43.8	18%	49.2	20%	66.5	22%
40	42.1	21%	47.1	23%	62.8	26%
30	35.8	33%	39.1	36%	54.3	36%
20	31.1	42%	33.0	46%	43.6	49%
10	25.0	53%	25.2	59%	33.6	61%
1	20.2	62%	19.0	69%	23.8	72%

Item 099 Back Lighting (Dynamic)	49LX570H		55LX570H		65LX570H	
	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings	Power Consumption (Watts)	Percent Savings
200	53.5	0%	62.0	0%	85.4	0%
190	50.4	6%	58.4	6%	79.0	7%
180	49.4	8%	56.9	8%	75.3	12%
170	47.8	11%	54.6	12%	73.0	15%
160	46.4	13%	52.9	15%	70.0	18%
150	44.1	18%	49.8	20%	66.6	22%
140	42.5	21%	47.6	23%	63.0	26%
130	36.0	33%	39.5	36%	54.4	36%
120	31.2	42%	33.3	46%	43.8	49%
110	25.1	53%	25.5	59%	33.7	61%
101	20.4	62%	19.2	69%	23.9	72%

Reference: TV Aux Input Configuration

DIRECT ACCESS Tuning *		TV		ENABLE					MPI DATA			Installer Menu Item 046 START AUX SRCE (Start Aux Source) Value
				Installer Menu			MPI DATA STATUS TYPE 0x41 SOURCES ENABLED (R/W)		DATA STATUS TYPE 0xD2 CURRENT AV SOURCE (R)	DATA STATUS TYPE 0x0D AUX SOURCE (R)		
Installer Menu Item 029 OLD OCV = 0	Installer Menu Item 029 OLD OCV = 1	Aux Input	Input Mode	Item	Function	Value	Enable Bit	Label	Value	Value	Description	Value
131-0	91-0	Video1 (Rear)	CV	39	REAR AUX EN	1	1	Rear Video (Aux)	1	0	VIDEO	1
132-0	92-0	HDMI2	DTV	91	HDMI2 ENABLE	1	2	S-Video Rear	2	0	VIDEO	5
			PC			2				2	COMPUTER	
133-0	93-0	HDMI1	DTV	35	HDMI1 ENABLE	1	3	Front Computer	3	0	VIDEO	3
			PC			2				2	COMPUTER	
134-0	94-0	RGB	PC	87	REAR RGB EN	1	5	SVGA Rear Computer	4	2	COMPUTER	4
135-0	95-0	HDMI3	DTV	92	HDMI3 ENABLE	1	6	NTSC Rear Computer	5	0	VIDEO	7
			PC			2				2	COMPUTER	

* Use Installer Remote to enter channel number indicated based on OLD OCV Installer Menu setting.

The *b*-LAN module is internal to the TV. It allows hotel/institution head end equipment with *b*-LAN technology to communicate, via the institution's RF distribution system, with the TV for configuration and control.

Installer Menu item 118 POWER SAVINGS controls the power circuitry for both the embedded *b*-LAN module and the GAME CONTROL/MPI port. The default value is 3—the *b*-LAN module is only powered when the TV is turned ON. See chart below.

POWER SAVINGS	TV OFF	TV ON
	b-LAN & GAME CONTROL/MPI Port Power	*b*-LAN & GAME CONTROL/MPI Port Power
1	On	On
3 (default)	Off	On

A *b*-LAN enabled head end device, such as an LG FMA-LG101, broadcasts over the RF distribution system to communicate to multiple TVs. When the TV is first installed, it must be turned ON in order for its embedded *b*-LAN module to receive communication from the head end device. At this point, if it is desired for the *b*-LAN module to always be powered, including while the TV is turned OFF, set Installer Menu item 118 POWER SAVINGS to 1.

Also, if MPI communication is required for external MPI control, set Installer Menu item 118 POWER SAVINGS to 1 so that the GAME CONTROL/MPI port circuitry is always powered.

Caution: POWER SAVINGS should NEVER be set to 7. This setting is intended for factory use only.

Reference: FTG Mode via EBL (Local Configuration)

The following steps outline local FTG configuration of individual TV EBLs using a direct PC-to-TV (EBL) connection. Refer to the *Free-To-Guest (FTG) Device Configuration Application User Guide* for further information.

FTG Device Configuration Application software is available online at: www.LGsolutions.com/ftgsoftware.

Note: If the TV CPU is already in FTG Mode, you cannot use this procedure to make changes to the FTG Channel Map and FTG Installer Menu settings. Refer to FTG Mode information on pages 7 to 9 for further details.

Note: If the preceding condition applies, but you wish to switch the TV to FTG Mode via EBL, see Reference section, "Restoring Factory Defaults on the TV(s)," for further information before proceeding.

1. Install (if necessary) and launch the FTG Device Configuration Application (v5.4.8 or later) on the PC that will be used to configure the EBL.

2. Build an FTG Channel Map using the FTG Channel Map Editor in the FTG Channel Map Configuration Utility (or, if applicable, open an existing FTG Configuration [.rml] file).

   Note: Up to 141 logical channels can be defined in the FTG Channel Map.

3. Connect the PC to the TV-LINK CFG jack on the TV's rear jack panel using a USB-to-TTL serial cable (TTL-232R-5V-AJ). If necessary, install the device driver on the PC.

4. Turn ON the TV.

   Note: If Installer Menu item 118 POWER SAVINGS is set to 3 (default), the TV must be ON in order for steps 5 and 6 below to be successful.

5. "Write" the FTG Channel Map to the EBL (switches the EBL from Pass-through Mode to FTG Mode).

   Note: After a "Write" of new data, the TV will briefly display a green text banner that shows the EBL firmware version and release date.

6. "Read" the current FTG Installer Menu settings from the EBL using the FTG Installer Menu Configuration Utility. If necessary to make changes to Installer Menu items, "Write" them back to the EBL in FTG Mode.

7. Save the FTG Channel Map and FTG Installer Menu settings to an FTG Configuration (.rml) file for future use.

8. Tune the TV to a logical channel in the FTG Channel Map.

TV-LINK CFG
Use to connect PC to TV (EBL) for local FTG Mode via EBL configuration.

USB-to-TTL Serial Cable
Required for local FTG Mode via EBL configuration.
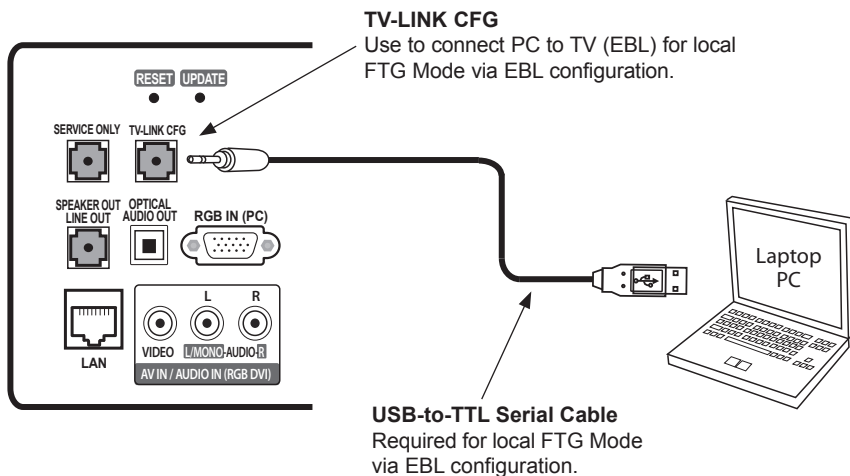
This section provides detailed settings information for Installer Menu item 042 AUTO INPUTS. To disable auto-sensing for all available Aux inputs, set item 042 to 0. To enable auto-sensing for all available Aux inputs, set item 042 to 255. For specifications on all other available settings (i.e., settings for individual inputs), refer to the table on the following page.

Note: When both item 042 AUTO INPUTS *and* item 041 SIMPLINK EN are enabled in the Installer Menu, HDMI inputs will be detected by SIMPLINK, but the Auto Input(s) Sensing Feature will not function.

In the Installer Menu, an informational code is displayed at the right of each Auto Inputs value, for example:

```
xxLX570H  PTC  INSTALLER  MENU
            CPU-CTV


042  AUTO INPUTS     241  7654XXX0


UPN  000-000-000-000        ASIC  D279
PTC  V1.00.008          CPU  V3.00.20.01
```
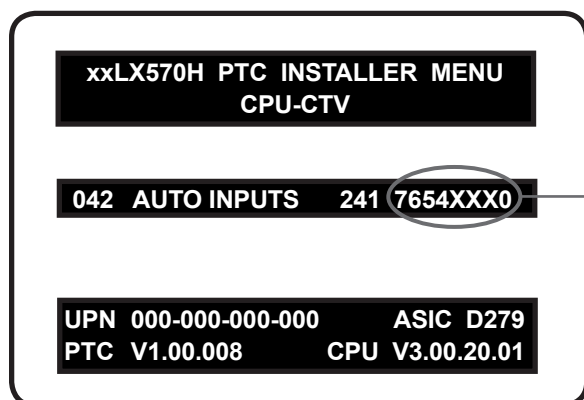
AUTO INPUTS Display Code
This example illustrates Installer Menu item 042 value 241, which enables auto-sensing for all available Aux inputs. The input #s in the display code (7, 6, 5, 4, 0 in this example) identify the enabled Aux inputs. See table below for a listing of the LX570H Aux inputs and their corresponding display code input #s. The table on the following page shows the display codes for all item 042 values.

Each code consists of eight characters that identify the Aux input(s) for which auto-sensing is enabled. The following table identifies the Installer Menu display code Input # for each Aux input that is available on the LX570H TV models. The table also identifies the Installer Menu item associated with each Aux input. Remember that in order for auto-sensing to be enabled for an input, that input must also be enabled in the Installer Menu.

Installer Menu Display Code Input #	Aux Input	Installer Menu	
		Item	Function
0	AV1	039	REAR AUX EN
4	RGB	087	REAR RGB EN
6	HDMI 1	035	HDMI1 ENABLE
7	HDMI 2	091	HDMI2 ENABLE
5	HDMI 3	092	HDMI3 ENABLE

Reference: Auto Input(s) Sensing Feature (Cont.)

Item 042 Value	Inputs					Installer Menu Display
	AV1	RGB	HDMI 1	HDMI 2	HDMI 3	
001	Enabled	Disabled	Disabled	Disabled	Disabled	DDDDXXX0
016	Disabled	Enabled	Disabled	Disabled	Disabled	DDD4XXXD
017	Enabled	Enabled	Disabled	Disabled	Disabled	DDD4XXX0
032	Disabled	Disabled	Disabled	Disabled	Enabled	DD5DXXXD
033	Enabled	Disabled	Disabled	Disabled	Enabled	DD5DXXX0
048	Disabled	Enabled	Disabled	Disabled	Enabled	DD54XXXD
049	Enabled	Enabled	Disabled	Disabled	Enabled	DD54XXX0
064	Disabled	Disabled	Enabled	Disabled	Disabled	D6DDXXXD
065	Enabled	Disabled	Enabled	Disabled	Disabled	D6DDXXX0
080	Disabled	Enabled	Enabled	Disabled	Disabled	D6D4XXXD
081	Enabled	Enabled	Enabled	Disabled	Disabled	D6D4XXX0
096	Disabled	Disabled	Enabled	Disabled	Enabled	D65DXXXD
097	Enabled	Disabled	Enabled	Disabled	Enabled	D65DXXX0
112	Disabled	Enabled	Enabled	Disabled	Enabled	D654XXXD
113	Enabled	Enabled	Enabled	Disabled	Enabled	D654XXX0
128	Disabled	Disabled	Disabled	Enabled	Disabled	7DDDXXXD
129	Enabled	Disabled	Disabled	Enabled	Disabled	7DDDXXX0
144	Disabled	Enabled	Disabled	Enabled	Disabled	7DD4XXXD
145	Enabled	Enabled	Disabled	Enabled	Disabled	7DD4XXX0
160	Disabled	Disabled	Disabled	Enabled	Enabled	7D5DXXXD
161	Enabled	Disabled	Disabled	Enabled	Enabled	7D5DXXX0
176	Disabled	Enabled	Disabled	Enabled	Enabled	7D54XXXD
177	Enabled	Enabled	Disabled	Enabled	Enabled	7D54XXX0
192	Disabled	Disabled	Enabled	Enabled	Disabled	76DDXXXD
193	Enabled	Disabled	Enabled	Enabled	Disabled	76DDXXX0
208	Disabled	Enabled	Enabled	Enabled	Disabled	76D4XXXD
209	Enabled	Enabled	Enabled	Enabled	Disabled	76D4XXX0
224	Disabled	Disabled	Enabled	Enabled	Enabled	765DXXXD
225	Enabled	Disabled	Enabled	Enabled	Enabled	765DXXX0
240	Disabled	Enabled	Enabled	Enabled	Enabled	7654XXXD
241	Enabled	Enabled	Enabled	Enabled	Enabled	7654XXX0

X = Aux input source is Disabled or Not Available (i.e., on these TV models)
D = Auto-sensing for input is Disabled
Input # = Auto-sensing for input is Enabled

RJP Legacy Models

- RJP-101M
- RJP-101ML
- RJP-110F
- RJP-110FW
- RJP-110W
- RJP-110WBR
- RJP-110S
- RJP-120G
- RJP-120T
- RJP-201B/202B

RJP Scaler Models

- RJP-201M
- RJP-301B
- RJP-401B

RJP Input Auto-sensing Hierarchy

Priority	Video	Audio
1st (Highest)	Digital Video In	Audio In (3.5mm)
2nd	PC Video In	Audio In (L/R)
3rd	Video In	Digital Video In

Reference: Restoring Factory Defaults on the TV(s)

This section describes how to restore all factory defaults or just the Installer Menu factory defaults either on a single TV that is currently in Pass-through or FTG Mode or on multiple TVs that are currently in FTG Mode.

Restore All Factory Defaults

This section describes how to restore a single TV, regardless of its mode, to a factory default condition. The following procedure requires that you contact LG technical support to obtain a predefined value/password for Installer Menu item 117 FACT DEFAULT that enables access to initiate a factory "IN-STOP" process, which restores all factory defaults. This procedure will also reactivate the EZ-Manager Wizard.

1. Use the Installer Remote to access the TV's Installer Menu.

2. Navigate to Installer Menu item 117 FACT DEFAULT, and key in the value provided by technical support. Then, press **OK**.

3. At the prompt for confirmation, key in the password provided by technical support. This will initiate the IN-STOP that restores the factory defaults on the TV.

Installer Menu Item 117 FACT DEFAULT

If the TV is currently in Pass-through Mode, you can set Installer Menu item 117 FACT DEFAULT to 1 to restore the Installer Menu factory defaults and clear the PTC Channel Map, including any assigned channel icons and custom text labels. Note, however, that if a complete restoration of the TV's factory defaults is required, see "Restore All Factory Defaults" above.

Additional FTG Mode via CPU Options

There are two additional options for restoring Pass-through Mode/Installer Menu factory defaults on TVs that are in FTG Mode via the CPU. The first enables you to restore a single TV to Pass-through Mode, while the second enables you to restore multiple TVs to Pass-through Mode at one time. However, both options require that you create a "Zero Mapped Channels" FTG Configuration (.tlx) file, i.e., an FTG Configuration file with no data. Refer to the *Free-To-Guest (FTG) File Manager User Guide* for further information.

• Using a USB memory device, import a "Zero Mapped Channels" FTG Configuration (.tlx) file on the TV. Refer to "Importing a Clone File" on pages 36 to 38 for further information on the import procedure.

• If your system uses a Pro:Centric server for remote management, use the Pro:Centric server Admin Client to load a "Zero Mapped Channels" FTG Configuration (.tlx) file on the Pro:Centric server. Refer to the *Pro:Centric Server Admin Client User Guide* for further information.

Additional FTG Mode via EBL Options

There are two additional options for restoring Pass-through Mode/factory defaults on TVs that are in FTG Mode via the EBL. The first enables you to restore a single TV to Pass-through Mode, while the second enables you to restore multiple TVs to Pass-through Mode at one time.

⚠️ **Note: While the IN-STOP process described above will clear both the PTC and the CPU, both options below only clear the PTC. Thus, the current Channel Map and TV setup menu settings will remain in the CPU after the reset is completed.**

• Using a direct PC-to-TV connection, "Write" an unpopulated Channel Map—that is, a Channel Map with 0 (zero) channels—to the TV. See Reference section, "FTG Mode via EBL (Local Configuration)," and/or the *Free-To-Guest (FTG) Device Configuration Application User Guide* for further information.

• If your system uses an FMA for remote management/broadcast configuration, configure the FMA device with an FMA Configuration (.fma) file that only contains a "0 Mapped Channels" FTG Channel Map to broadcast to the TV EBL(s). Refer to the *Free-To-Guest (FTG) Device Configuration Application User Guide* and/or the Installation & Configuration Guide for the FMA device for further information.

This section describes the TV Zoning feature available with the LX570H model TVs. The TV Zoning feature enables you to create localized configurations for TVs in selected locations, or "Zones," within the installation environment, for example, a hotel lobby, fitness center, restaurant, etc. This feature is primarily intended for use when the TV is configured for FTG Mode via CPU operation. However, selected elements of TV Zoning (Installer Menu and TV Setup Menu profile Zone assignments) may also be used with TV cloning processes using a USB memory device / ".tlx" file.

Refer to the appropriate section(s) below for further information on the TV Zoning feature and how to set the TV Zone # in a TV that is currently in Pass-through Mode.

Using the TV Zoning Feature with FTG Mode via CPU Configuration

The FTG File Manager may be used to create an FTG Configuration (.tlx) file that contains multiple Installer Menu and TV Setup Menu profiles, each with its own Zone assignment. Up to nine unique Zones can be designated for LX570H FTG Installer Menu and/or TV Setup Menu profiles. Zone restrictions can also be placed on individual channels in the FTG Channel Map. Thus, for example, you may create an FTG Installer Menu and/or TV Setup Menu profile to specifically configure a TV in the hotel lobby and also restrict the channels that are available to be tuned on that TV.

The TV Zone # must be set appropriately on each TV in order for the TVs to be configured correctly. See "Set the TV Zone # in the TV" on the following page, and set the TV Zone # in all the TVs in a select area, so that the TVs are configured with corresponding FTG Installer Menu and/or TV Setup Menu settings and/or can omit channels that have been restricted in the FTG Channel Map. TV Zone 0 is the default TV Zone #.

The following subsections briefly describe how to assign Zone designations in the FTG File Manager. Refer to the *Free-To-Guest (FTG) File Manager User Guide* for further information.

FTG Installer Menu Profile Zone Assignments

The FTG File Manager main screen enables you to change the Zone assignment (default = Zone 0) for each Installer Menu profile to be included in an FTG Configuration (.tlx) file. For example, you may wish to create one LX570H Installer Menu profile for the hotel lobby and another LX570H Installer Menu profile for the fitness center, both of which are different from the FTG Installer Menu profile used for standard guest rooms. The TV Zoning feature enables you to save multiple LX570H FTG Installer Menu profiles, each with its own Zone assignment, in one FTG Configuration (.tlx) file. If each TV in the aforementioned locations (Zones) has had its TV Zone # set appropriately, as described in the procedure on the following page or via the EZ-Manager Wizard, the TV(s) will only be configured by the Installer Menu profile that matches its(their) Zone setting.

In the FTG File Manager main screen, you can also edit the Zone assignment for each Installer Menu profile and/or TV Setup Menu profile already present in the FTG Configuration List and TV Setup Menu List windows.

Note: See also the FTG File Manager main screen overview on page 41. In addition, note that TV Setup Menu profiles cannot be created in the FTG File Manager; they must be saved (exported) from a TV.

FTG Channel Map Zone Restrictions

The FTG Channel Map Editor in the FTG File Manager's FTG Channel Map Configuration Utility enables you to place Zone restrictions on individual channels that may be prohibited or deemed unsuitable for selected locations. In the FTG Channel Map Editor, one or more Zone restrictions (1–8) may be placed on each channel that is to be restricted. For example, if you wish to restrict a channel from Zones 2 and 4, select both "Zone 2" and "Zone 4" in the Zone Restriction section of the FTG Channel Map Editor screen when defining or editing that channel.

Reference: Using the TV Zoning Feature (Cont.)

Note: While a channel can be restricted from up to eight Zones, a TV can only ever be in (set for) one Zone. See also the FTG Channel Map Editor overview on page 43.

At the same time, keep in mind that the TV Zone designations are not mutually exclusive. That is, you may opt to place Zone restrictions on selected channels in the FTG Channel Map, but at the same time, you can choose to configure all TVs at the site with the same Installer Menu and/or TV Setup Menu settings. For example, an FTG Configuration (.tlx) file being used to configure the TVs at a site may contain multiple Installer Menu and TV Setup Menu profiles with different Zone assignments, as well as an FTG Channel Map with Zone restrictions on several channels. Each TV that still has the default TV Zone 0 setting will *only* be configured by the Installer Menu and/or TV Setup Menu profile(s) with a Zone 0 designation. If, on the other hand, the TV Zone # is set to 1, the TV will first look in the file for the LX570H Installer Menu and/or TV Setup Menu profile(s) with a Zone 1 designation. If none of the LX570H Installer Menu and/or TV Setup Menu profiles has a Zone 1 designation, the TV will then look for the LX570H profile(s) with a Zone 0 designation. For the FTG Channel Map configuration, when the TV Zone # is set to 0, the TV will ignore any Zone restrictions (1–8) that may be placed on channels in the FTG Channel Map. However, when the TV Zone # is set to 1, the TV will omit any channels that have been restricted from Zone 1 in the FTG Channel Map.

Using the TV Zoning Feature with Cloning Configuration

A location-specific configuration / Clone (.tlx) file may be saved (exported) from a Master TV and then be used to configure Target TVs. For example, if the TV Zone # in the Master TV is set to 3 before the Clone file export is initiated, the Master TV's Installer Menu and TV Setup Menu profiles will be saved with the TV Zone 3 assignment. In order to configure the Target TVs with the Zone 3 Installer Menu and TV Setup Menu profiles exported from the Master TV, you must set the TV Zone # accordingly in the Target TVs before importing the Clone file. See "Set the TV Zone # in the TV" below. Also, see "Cloning Procedures" on pages 35 to 38 for additional information on the cloning processes. TV Zone 0 is the default TV Zone #.

Set the TV Zone # in the TV

You can set the TV Zone # in the EZ-Manager Wizard (see "EZ-Manager Wizard" on pages 12 to 18) or, if the TV is in Pass-through Mode, via the TV's setup menus as described below. Note that the following procedure can only be performed while the TV is in Pass-through Mode. You will also be able to specify a Label (North, South, East, West) and Room Number for this TV, if desired.

1. Turn ON the TV.

2. Press **MENU SETTINGS** on the Installer Remote, and use the arrow navigation keys to select/highlight the **OPTION** menu option. Then, press **OK**.

3. Use the Up/Down arrows to select **Zones & Room Number**, and then press **OK**.

4. In the Zone, Label, and Room Number pop-up window, complete the appropriate fields as described below. Use the Left/Right arrow keys on the Installer Remote to navigate between each of the fields.

   • Zone: Enables you to set a TV Zone # so that the TV can be configured with Installer Menu and/or TV Setup Menu settings intended only for the assigned Zone. The Installer Menu and/or TV Setup Menu settings may be provided in a Clone/Configuration (.tlx) file. If the TV is being configured for FTG Mode via CPU, the TV Zone # setting also allows the TV to omit channels that have been restricted in the FTG Channel Map (see "FTG Channel Map Zone Restrictions" on previous page).

(Continued from previous page)

To change the TV Zone, navigate to the Zone field, and use the Up/Down arrow keys to specify the desired TV Zone # (0–8).

- Label: Allows you to select a North, South, East, or West text label for this TV. Use the Up/Down arrow keys to select the applicable label.

- Room Number: Allows you to specify the number of the room in which the TV is located. You can use the number keys on the Installer Remote to direct enter a room number. Use the Dash key on the Installer Remote as necessary to toggle between number and letter characters in the Room Number field. Also, you can use the Flashback key on the Installer Remote to delete characters in this field.

5. When you have completed the fields as necessary, select **OK**, and then press **OK** on the Installer Remote to close the window and return to the Option Menu.

6. Press **MENU SETTINGS** to return to program viewing.
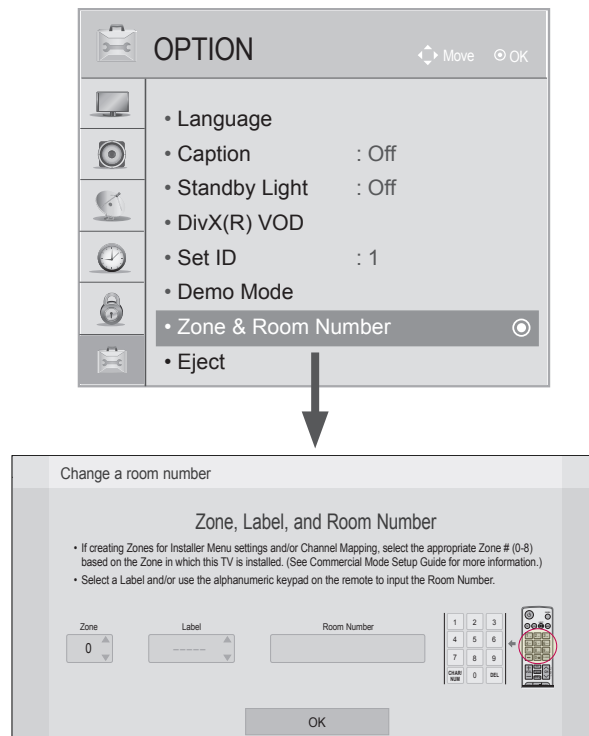
Reference: LX570H Rear and Side Jack Panels

UPDATE
Restricted to software updates.

HDMI IN 1
Connection for HDMI output
from external device.

RESET
Initiates a hardware reset and
turns the TV OFF.

GAME CONTROL/MPI
When the TV/EBL is in Pass-through Mode, the
MPI function enables an external MPI control
device (i.e., VOD/PPV STB, etc.) to control the TV.
Game Control—EBL in SONIFI PPV Mode only.

TV-LINK CFG
(3.5 mm jack) Use to connect PC to TV (EBL)
for local FTG Mode via EBL configuration.

SERVICE ONLY
Restricted to service updates.

RGB IN (PC)
Connection for RGB output
from PC.

RESET UPDATE

SERVICE ONLY TV-LINK CFG

HDMI IN 1

SPEAKER OUT OPTICAL
LINE OUT AUDIO OUT RGB IN (PC)

GAME CONTROL
/ MPI

ANTENNA/
CABLE IN

L   R

VIDEO L/MONO AUDIO R RJP

LAN AV IN / AUDIO IN (RGB DVI)

ANTENNA/CABLE IN
Connect to Antenna/
CATV.

SPEAKER OUT / LINE OUT
(3.5 mm jack) Connect external audio (fixed
speaker, variable speaker, or fixed line level
[amplifier]) equipment. See Reference
section, "External Stereo Speaker
Specifications," for further information.

RJP
Connection for Remote Jack Pack (RJP)
Control cable.

⚠ **Caution: Do NOT connect a standard
Ethernet cable to the RJP port, as this may
damage the TV and network equipment.**

LAN
Use for video IP and/or network connections.

OPTICAL AUDIO OUT
Use for amps and home theater systems.
Note: When the TV is OFF, this port is not
enabled.

AV IN/AUDIO IN (RGB DVI)
Connect to composite audio/
video output from external device, or
connect audio for RGB or DVI device.

Side Jack Panel

USB IN

HDMI IN 3

HDMI IN 2

USB IN
Insert USB memory device
for software updates, cloning
purposes, FTG Mode via CPU
configuration, picture/music
entertainment, etc., as applicable.

HDMI IN 2 & 3
Connection for HDMI output
from external device.

Reference: External Stereo Speaker Specifications

The SPEAKER OUT / LINE OUT 3.5 mm stereo jack on the LX570H rear panel provides stereo speaker signal outputs (fixed speaker, variable speaker, or fixed line level [amplifier]) for external audio equipment. Set Installer Menu item 097 AUDIO OUTPUT as required in accordance with external audio equipment connected to the TV. Also, refer to the following diagram for pinout details.

⚠ **Caution: Do NOT plug in a mono connector, as this may damage the TV.**

**SPEAKER OUT
LINE OUT**
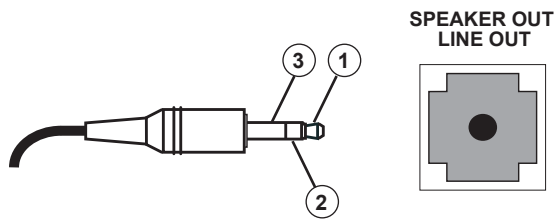
1	LEFT (Tip)
2	RIGHT (Ring)
3	GROUND (Sleeve)

Reference: Installer Remote Control Typical Key Functions

The LG Installer Remote is supplied with and dedicated to operate the TV. The LG Installer Remote illustrated below shows typical remote control functions and is provided for reference only. This Installer Remote may vary from the Installer Remote supplied with the TV.

⏻ (POWER)
Turns the TV ON or OFF

Numbers (0 - 9) & DASH
Use to enter a channel or program number. Dash is used for sub-channel numbers such as 2-1, 2-2, etc.

FLASHBK (FLASHBACK)
Returns to the previously tuned channel or input.

VOLUME UP/DOWN
Increases/decreases sound level.

CC
Activates subtitles.

TIMER
Sets the amount of time before the TV automatically turns itself OFF.

MUTE
Switches sound ON or OFF.

CHANNEL/PAGE UP/DOWN
Changes channels based on channels in the channel lineup. Moves to previous or next screen in Pro:Centric channel guide.

DVD/USB buttons
Use to control DVD player or view USB memory device content.

ⓢIMPLINK
Accesses the AV devices connected to the HDMI ports of the TV. Opens the SIMPLINK Menu (when Installer Menu item 041 SIMPLINK EN is set to 2 or 3).

(PIP/SWAP options N/A for these TV models)

SAP
Analog Mode: Selects MTS sound (Mono, Stereo, or SAP). DTV Mode: Changes audio program language, if additional languages are available. *

TV/DVD
Select the remote's operating mode: TV or DVD.

INPUT
Displays available Aux inputs.

(Q. MENU/MARK options N/A for these TV models)

Arrows (Up/Down/Left/Right) & OK/ENTER
Use to navigate on-screen menus, direct tune channels, and adjust TV settings.

MENU SETTINGS
Displays and removes the TV setup menus (or, if applicable, the Function Menu).

PORTAL
Displays and removes the Pro:Centric interactive menu.

INFO
Displays channel information.

GUIDE
Displays and removes the Pro:Centric channel guide/EPG.

↩ (RETURN)
Returns one level to the previous menu/display.

EXIT
Clears all on-screen displays and returns to program viewing.

Color buttons access special functions in some menus.

* SAP notes:
  • If SAP is selected and no SAP is provided, sound may not be heard on channel.
  • Each channel may have its own SAP setting.
  • Each time digital channels are tuned, the TV attempts to locate the default audio program language. If the default audio program language is not available, the TV will use the first available audio program.

Some Quick and Easy Tips for Resolving Problems

Installation

Symptom	Possible Cause(s)	Possible Solution(s)
Cannot direct enter channel number.	(TV in Pass-through Mode) Installer Menu item 028 CH. OVERIDE is set to 0, i.e., disabled (recommended setting).	If Installer Menu item 028 CH. OVERIDE is set to 0, only channels that are active in the TV's channel lineup can be selected. Set CH. OVERIDE to 1 to allow access for direct keypad entry to all channels.
	(TV in FTG Mode) The channel entered is not included in the FTG Channel Map.	Channel access is restricted to channels included in the FTG Channel Map. If necessary, make changes to the FTG Channel Map using the FTG File Manager or the FTG Device Configuration Application, as appropriate.

Picture Reception and Sound

Symptom	Possible Cause(s)	Possible Solution(s)
No picture.	TV is turned OFF.	• Turn TV ON. • Power failure?
	Antenna/cable not connected.	Connect antenna/cable signal to TV.
	Connections incorrect.	Check connections on TV.
	MPI not connected.	If applicable, connect MPI cable to MPI device.
	Encrypted program.	Try another channel.
	Wrong tuning band.	Adjust Installer Menu settings.
Normal picture, poor or no sound.	Audio muted.	Press MUTE or use Volume Up key to increase sound level.
	Broadcast problem.	Try a different channel.

Erratic Operation

Symptom	Possible Cause(s)	Possible Solution(s)
Installer Menu setup.	Wrong Installer Menu settings.	Adjust Installer Menu settings as required.

Installer Remote

Symptom	Possible Cause(s)	Possible Solution(s)
Remote doesn't work.	Remote not in TV Mode.	Use MODE key to select "TV"; puts remote into TV Mode.
	Not aimed at IR receiver.	Point remote at IR receiver on TV.
	Remote too far from IR receiver or IR path is obstructed.	Move remote closer to IR receiver on TV, darken room, and/or remove obstructions.
	MPI not connected.	If applicable, connect MPI cable to MPI device.
	Weak batteries.	Replace batteries.
	Wrong battery polarity.	Check that "+" and "-" match in battery compartment.
	Too much light in room.	Dim room light.
	Wrong Installer Remote.	Requires compatible LG Installer Remote. Contact your LG representative.

Troubleshooting (Cont.)

Commercial Mode Check / FTG Operation Troubleshooting

Commercial Mode Check

Use this flowchart to determine whether the TV is currently in Commercial Mode.

```
┌─────────────────────┐
│ Press POWER on      │
│ Installer Remote.   │
└─────────────────────┘
          │
          ▼
    ╱ TV turned ╲     No      ╱ TV        ╲    No   ┌──────────────────┐
    ╲   ON?     ╱ ────────▶   ╱ connected  ╲ ──────▶│ Plug into AC     │
                              ╲ to AC      ╱         │ Power outlet.    │
          │                   ╲ Power?    ╱          └──────────────────┘
          │ Yes                    │
          │                        │ Yes
          │                        ▼
          │                  ┌──────────┐
          │                  │ Bad      │
          │                  │ TV       │
          │                  └──────────┘
          ▼
┌─────────────────────┐
│ Leave the TV set ON,│
│ and press MENU      │
│ SETTINGS on the     │
│ Installer Remote.   │
└─────────────────────┘
          │
          ▼
    ╱ Function ╲  No   ┌──────────────────┐    ╱ On-screen ╲  No  ┌──────────────────────┐
    ╲ Menu     ╱ ────▶ │ Press MENU       │──▶ ╱ menu display╲────▶│ TV is not in Commercial│
    ╲ on display?╱      │ SETTINGS repeatedly│   ╲ no longer  ╱     │ Mode. Call Technical  │
                       │ as if to access the│   ╲ toggles?  ╱      │ Support for assistance.│
          │            │ Installer Menu.  │         │              └──────────────────────┘
          │ Yes        └──────────────────┘         │ Yes
          ▼                                          ▼
┌─────────────────┐                        ┌─────────────────┐
│ TV is in        │                        │ TV is in        │
│ Commercial Mode.│                        │ Commercial Mode.│
└─────────────────┘                        └─────────────────┘
```

FTG Operation Troubleshooting

The following table provides troubleshooting information for when the EBL is configured for FTG Mode operation.

Symptom	Possible Cause(s)	Solution(s)
Communication Error ("Communications Timeout")	Cable(s) not connected.	Check and connect communication cables.
	TV not powered.	Check/connect the TV power cord.
	TV not turned ON.	TV needs to be turned ON (default setting of Installer Menu item 118 POWER SAVINGS).
	Wrong COM (communication) port.	In the FTG Device Configuration Application, select the correct COM port for the cable being used.

b-LAN

SONIFI Solutions, Inc. proprietary RF communication system used to configure/control TV via RF distribution system.

Channel Lineup

Channels set in the TV memory, via Auto Tuning/manual editing.

Cloning

The process of capturing a Master TV Setup and transferring it to a Target TV using a USB memory device.

Commercial Mode

A mode of operation that provides a broad range of commercial TV features based on control (settings) provided by the PTC and/or an MPI control device.

CPU

The TV's Central Processing Unit. Responsible for the presentation of video and audio from content received via the TV's tuner or Aux inputs.

EBL

Embedded b-LAN module. See also b-LAN.

E-Z Installation

Enables splash screen image, TV configuration, and software/firmware file downloads to selected TV models from a Pro:Centric server. Managed and administered via the Pro:Centric Admin Client.

EZ-Manager Wizard

Lodging model TV configuration wizard that provides configuration options for Pro:Centric operation as well as an option for using a USB memory device to configure a TV.

FTG Channel Map

Typically refers to a logical channel mapping of physical RF channels. This allows digital channels, like analog channels, to be tuned without requiring the dash key. Also, channels (analog or digital) can be arranged in any order that seems logical for customer tuning/viewing.

FTG Mode

LG commercial TV mode that enables decryption of Pro:Idiom encrypted channels and uses logical channel mapping. Implementation and TV operation is based on the "owner" of the FTG Logical Channel Map—the CPU or the EBL. LG's proprietary PC software is required for configuration.

Function Menu

Available via Installer Remote "MENU" key. Indicates the TV is not in Pass-through Mode. Restricts menu options to a subset of the TV setup menus, allowing users to retain functional control, while disabling setup options.

Installer Menu

Defines commercial TV functionality based on the parameters set.

LG Free-To-Guest (FTG)

Refers to a particular commercial mode of operation within an LG TV. See also FTG Mode.

Logical Channel Number

A number assigned to either a physical or virtual channel number in a Logical Channel Map.

Major Channel Number

Typically, the RF channel number assigned to a digital video stream.

Master TV

A TV whose Channel Map and Installer Menu and TV setup menu settings have been configured as a Master TV Setup for cloning purposes.

Minor Channel Number

A sub-channel or program number assigned to the content embedded in the digital video stream.

MPI

Multiple Protocol Interface. An MPI port or, for some TV models, an MPI card slot provides external control options for solution providers.

Pass-through Mode

The TV's factory default mode of operation. TVs can be configured for stand-alone use or as Master TVs for cloning purposes, and/or TVs may be controlled externally in this mode.

Physical Channel Number

The major channel number assigned to represent a specific 6 MHz RF band as specified by either the broadcast or CATV channel plan. See CEA (formerly EIA) or NCTA specifications for further information.

Pro:Centric Application

LG content delivery and communication interface that provides interactive entertainment, weather, amenities, etc. information for end users. (Powered by Pro:Centric server.)

Pro:Centric Admin Client

Web editor/content wizard provided for service provider and customer configuration of Pro:Centric application elements.

Pro:Idiom

Zenith proprietary security software that unlocks access to premium content to help assure rapid, broad deployment of HDTV and other high-value digital content.

PTC

Protocol Translator Card. The commercial controller (microprocessor) of the commercial TV.

Target TV

A TV to which a Master TV Setup will be transferred.

TV Setup Menus

Available via Installer Remote "MENU" key in Pass-through Mode only. Menus provide access to setup and functional features of the TV.

USB Memory Device

A USB flash drive or USB storage device, etc. that can be used for TV configuration purposes (typically cloning or FTG Mode via CPU configuration) or for updating TV software.

Virtual Channel Number

An alias (virtual) channel number provided in the data stream, by the broadcaster, of a digital broadcast channel to be displayed by consumer TVs in place of the physical channel number. The major number is the same as the original analog channel number and the minor number is the nth program available in that digital video stream.

Document Revision History / Open Source Software Notice

Document Revision History

Date	Description
April 2015	Revision A: New document
April 2015	Revision B: Installer Menu item 099 BACK LIGHTING update
May 2015	Revision C: Import Clone File and Master TV Setup updates

Product documentation is available online at: **www.LGsolutions.com**.

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